

CAPE OF GOOD HOPE.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR THE COLONY

ON THE

PUBLIC HEALTH

AND ON THE

Government and State-Aided Hospitals of the Colony

TOGETHER WITH

**REPORTS OF DISTRICT SURGEONS AND LOCAL
AUTHORITIES**

For the Two Calendar Years 1904 and 1905.

Presented to both Houses of Parliament by Command of His Excellency the Governor
1906.

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TABLE OF CONTENTS.

	PAGES.
I. Report of the Medical Officer of Health for the Colony :	
(1) PRELIMINARY	i
Scope of Report	iii
Necessity for Additional Government Medical Officers ...	iv
(2) THE LOCAL AUTHORITY. Powers of the Central Health Authority	iv
Compulsory Powers	v
The Standard Regulations	vi
The Draft Public Health and Municipal Bills	vi
Some Examples of Municipal Shortcomings	vii
Difficulty of Controlling Expenditure under Section 38 of Act No. 27 of 1897	viii
Proposed Amendment of Section 38 by the Draft Public Health Bill	x
Examples of Excessive Expenditure by Local Authorities under Section 38	xi
Contributions from the Public Treasury chiefly benefit the larger Municipalities	xiii
Municipal and other Local Bye-Laws	xiii
(3) THE GENERAL SANITARY OUTLOOK in 1904 and 1905 ...	xv
Annual Reports of District Surgeons and Local Authorities ...	xvi
Effects of Epidemics in Improvement of Sanitation ...	xvi
Water Supplies	xvii
Disposal of Night-Soil	xviii
Slaughter-Houses	xix
„ in the Cape Peninsula	xxi
Powers for the Control of Slaughtering	xxi
Measures Adopted in Other Countries	xxiii
Inspection of Meat and Food	xxiv
Unsound Meat	xxiv
Unsound Food	xxvi
The Control of Dairies and Milk Shops	xxvii
Tuberculosis in Dairy Cattle	xxvii
Memorandum on the Prevalence of Tuberculosis amongst Dairy Stock in the Peninsula	xxviii
Native Locations	xxix
Cemeteries and Burial Grounds	xxxi
Sanitary Powers of Rural Authorities	xxxii
(4) THE REPRESSION OF PREVENTABLE DISEASE.	
SMALL-POX	xxxiv
„ In the Native Territories	xxxv
„ In the Cape Peninsula	xxxv
„ In the Paarl	xxxvi
„ In Beaufort West	xxxvii

	PAGES.
SMALL-POX—(<i>continued</i>).	
„ In Kimberley	xxxviii
„ In East London	xl
„ In the Herschel District	xl
„ In the Glen Grey District	xli
„ On the recognition of Small-pox in the Colony ...	xli
„ Effect of Vaccination on the Disease... ..	xliv
PUBLIC VACCINATION	xlvi
„ Proposed Amendment of existing Vaccination Law	xlvi
„ The Cost of Public Vaccination... ..	l
„ Vaccination by Lay Vaccinators	li
PLAGUE	liii
„ Difference of Mortality in different Races... ..	lv
„ Difference in type of the disease according to Race and Sex	lv
„ Plague in 1904 and 1905	lvii
„ Cleansing and Disinfecting Schemes	lix
„ The cost of Plague	lx
ENTERIC FEVER	lxiii
„ Some Water-borne Outbreaks	lxv
„ At Petrusville	lxvi
DIPHThERIA	lxvii
MEASLES	lxvii
„ Epidemic in the Colony	lxviii
PUERPERAL FEVER	lxix
„ Unsatisfactory Nature of present Legislation ...	lxx
„ Procedure at present followed... ..	lxxi
„ Some examples	lxxi
TUBERCULOSIS and its spread	lxxiii
„ Mortality from, in the Chief Towns... ..	lxxiii
„ „ from, as compared with England and Wales	lxxv
„ In Our Gaols	lxxvii
„ Example of the occurrence of, in a private community	lxxvii
„ Among Railway Employees	lxxviii
„ Its Lessons applied to the Colony generally ...	lxxx
„ Testimony of Medical Officers to the increasing prevalence of	lxxxix
„ Suppressionary Measures	lxxxiii
LEPROSY :—	
„ The segregation of Lepers	lxxxiv
„ Lepers at large	lxxxv
„ Medical Examination of Lepers	lxxxv
„ Checks for Lunatics as compared with Lepers ...	lxxxvi
„ Discharges from Leper Asylums	lxxxvii
„ Dr. Armauer Hansen's Views	lxxxix
„ Treatment of Lepers	xc
„ Leprosy Research	xc

	PAGES.
SYPHILIS :—	
„ Working of Part I of the Act	xcii
„ Antagonistic effect of the Morality Act	xcii
„ Cost of Working Part I of the Act	xciv
„ Working of Part II of the Act	xciv
„ Prevalence and spread of	xcv
„ Example of its spread in Hopefield	xcvi
„ Danger of spread to Europeans	xcviii
„ Cost of Administering Part II of the Act	xcix
(5) CANCER :—	c
„ Occurrence of Malignant Disease in the Cape Peninsula	ci
„ In Families	ciii
(6) GOVERNMENT AND STATE-AIDED HOSPITALS :—	
System of Government Inspection	cvi
General Statistical Information	cviii
Number of Patients treated. Effects of the general depression	cix
Statistics of Out-Patients	cxi
Comparison of the Work done by State-Aided Hospitals in different years	cxii
The Staffs of the Government-Aided Hospitals	cxii
Average cost per Patient	cxiii
Ordinary Revenue and Expenditure of State-Aided Institutions	cxiv
The State Contribution	cxvi
How it is fixed	cxvi
Assets and Liabilities	cxviii
Variations in the working of different Institutions	cxviii
Government Institutions	cxix
The Total Expenditure on the upkeep of Public Hospitals	cxxi
Albany General Hospital	cxxi
Barkly West Hospital and Convalescent Home	cxxii
Cape Town Free Dispensary	cxxiii
Queen's Central Hospital, Cradock	cxxiii
Frere Hospital, East London	cxxv
Midland Hospital, Graaff-Reinet	cxxvi
Kimberley Hospital	cxxvii
Victoria Hospital, Mafeking	cxxviii
Royal South-Western Hospital, Oudtshoorn	cxxix
Frontier Hospital, Queenstown	cxxx
Vryburg Hospital	cxxx
(7) GENERAL :—	
The Public Health Laboratory	cxxxix
Examination of Rats	cxxxix
Pasteur's Anti-rabic Treatment	cxxxix
The Testing of Disinfectants	cxxxix
Pathological Museum	cxxxix
The Closure of the Grahamstown Bacteriological Institute	cxxxix
Manufacture of Calf Lymph	cxxxix
Issue of Curative Sera	cxxxix
Malta or Mediterranean Fever	cxxxix

	PAGES.
(7) GENERAL—(<i>continued</i>).	
Port Health Work	exxxv
Importation of Second-Hand Clothing	exxxv
The Examination of Foodstuffs at the Ports	exxxvii
Congress of Medical Officers of Health for the several South African Colonies	exxxviii
Native Abakweta and Borwera Rites	exxxviii
The Public Health and Municipal Bills	exxxix
The Staff	exxxix

ANNEXURES TO REPORT:—

(“A”) 1. Report of the Baeteriological Assistant	A—3
2. Some Observations and Remarks on the progress and present position of the testing of Disinfectants	A—8
3. Letter addressed to Medical Praetitioners and Public Hospitals requesting co-operation in regard to the establishment of a Pathological Museum	A—16
4. Report of the Additional Port Health Officer at Table Bay	A—17
(“B”) Statistical Returns of Government and State-Aided Hospitals and Kindred Institutions	A—22
(“C”) Returns of Small-Pox and Vaccinations and the Expenditure relating thereto	A—40
(“D”) Returns of Lepers	A—54
(“E”) Statistical Returns under “The Contagious Diseases Prevention Act, 1885”	A—60
(“F”) Reports on N'Dabeni and New Brighton Native Reserve Locations	A—75

II. Reports of District Surgeons :

Circular calling for Reports	1-6
For the Districts of the Colony Proper	7-150
For the Districts of the Native Territories	151-176

III. Reports of Local Authorities : 177-275

IV. Reports of the Medical Inspectors under the Contagious Diseases Prevention Act, 1885 ... 276-285

ERRATA.

- (1) In Table 7, Annexure “B,” for 1904, an amount of £355 appearing as Extraordinary Revenue to the credit of the Frontier Hospital, Queenstown, should have been included as Ordinary Revenue in Table 3 making the total Ordinary Revenue of this Hospital for the year £2,850 1s. 11d, and the Extraordinary Revenue, nil.
- (2) In Table 6, Annexure “B,” for 1905, the total average daily cost per patient for State-aided Hospitals should be 6s. 9·31d. as printed in Table 5, and not 6s. 10·07d.

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PART I.

Report of the Medical Officer of Health for the Colony.

55, Parliament Street,
Cape Town, 12th April, 1906.

To the Honourable
The Colonial Secretary.

SIR,—I have the honour to present a Report on the Public Health covering the Two Calendar Years, 1904 and 1905.

I. PRELIMINARY.

It is necessary to explain the reason for reporting on these two years together. By a Resolution of the House of Assembly, passed during the Session of 1904, it was ordered that the Annual Reports of the Civil Service for presentation to Parliament should, for the future, cover the Financial Year ending on the 30th June, instead of the Calendar Year ending on the 31st December, which, until then, had been the annual period for reports. This altered arrangement necessitated the presentation of reports for the abbreviated period of the first six months of the year 1904, so that subsequent reports, commencing from the 1st July, 1904, would be for the full period of a Financial Year. Such Half-Yearly Reports were issued, but before the time arrived for making the first Annual Report on the Financial Year, the impracticability of the new arrangement was so decisively demonstrated that Parliament, during the Session of 1905, decided to revert to the former practice of reporting on the Calendar Year. It thus again became necessary, in order to maintain an unbroken series of Records, to frame reports for a half-year

—the remaining half of the year 1904. As, however, a statistical report covering a period of only half a year would be of practically little value, and, moreover, to make such a report would have entailed considerable expenditure for the preparation and printing of the component reports and the tabular matter, it was decided not to prepare a separate report for the second half of the year 1904, but that, for the purpose of continuity of record, the statistics and information relating to the whole of the year 1904 should be combined with the report for the year 1905. It is thus that the present report covers the work and statistics of the two years.

It is regretted that these statistics cannot include the Vital Statistics to be obtained from the registration of Births and Deaths, statistics which are absolutely essential for the preparation of any satisfactory Report on the Public Health. But as I have had occasion to point out in my previous Annual Reports, it is quite impracticable to deal with the Vital Statistics of the Calendar Year so soon after its close, as is necessitated if a report is to be presented to the next ensuing Session of Parliament.

The registration returns of Births and Deaths registered in the Colony cannot under any circumstances be completed for at least three months after the close of each year, inasmuch as the Births and Deaths Registration Act allows that period of grace before Births and Deaths occurring in the Rural areas of the Colony need be registered at all by the persons upon whom the Statute places the duty of giving information, and, as a matter of fact, even after the expiration of the statutory period, there remains a not inconsiderable number of events which are still later in being recorded. Furthermore, at the conclusion of this statutory period, a certain amount of time is necessary to enable the Deputy Registrars to make up their returns and transmit them from all parts of the Colony to the Registrar-General, by whom, when they are received, the information they contain has to be examined, abstracted, combined and tabulated before it can be rendered available for the use of the Medical Officer of Health for the Colony, in whose Office the information has finally to be worked up and analysed for the purpose of these reports, a process which requires not only further time but also clerical assistance, a factor in which this Office is lacking.

It is, therefore, obvious that, even in the case of a late Session of Parliament, it is quite impossible for the Vital Statistics of the preceding Calendar Year to be fully reported upon in time for presentation at that Session. If proof of this be required, I need but mention that the statistics of Births and Deaths for the Thirty-five Chief Towns of the Colony for the Calendar Year 1903 were only received in this Office on the 17th September, 1904, those for the first half of 1904 were received on the 20th March, 1905, and those for the whole year 1904 on the 23rd October, 1905, while those for the year 1905 have, of course, not as yet been received.

Nor is this Colony exceptional as compared with other countries in the time required for the preparation of such Reports. For example, the Report of the English Registrar-General on the Vital Statistics, furnished by the registration of Births and Deaths in England and Wales, for the Calendar Year 1903, was dated the 31st December, 1904, and was not published until 1905 was far advanced, while the Report on the decennial period 1891-1901, has not yet, in 1906, been issued. Again, the Report of the Medical Officer to the English Local Government Board, on the administration of his Department during the Parliamentary Year, 1903-04, which is merely an Administrative Report and does not involve the

preparation of any Vital Statistics, was not issued until the end of the year 1905. And, it may be observed, that the facilities for the exercise of despatch are greater in England than in this Colony.

But, beyond these, more or less inevitable, causes of delay, there is another circumstance which seriously affects the preparation of my Annual Report, which is the smallness of the Staff with which the work of this Office has to be conducted. With a Clerical Staff of six Male Clerks and one Lady Typist, work of great scope and variety has to be performed, involving, during the year 1905, the passage through our Records of as many as 20,129 communications, not counting acknowledgments, returns and routine communications. As a fact, the regular work can only be effected with the utmost difficulty and by the Staff constantly working far beyond the ordinary Civil Service hours, and even then it occasionally falls into arrear. But with a Staff already working at high pressure, little margin or reserve is left for coping with any extra demand, such as that involved in the preparation of Annual Reports, which can only be done by making what is, in my opinion, an unfair demand on an already over-taxed Staff. I should add that not one of these Officers receives any additional remuneration for his over work. Indeed, I cannot too highly extol the ungrudging, self-denying labour which the Staff of this Office gives to the public service.

Scope of this Report.

For the reasons I have stated, this Report will have to confine itself mainly to dealing with matters of administration and questions relating to the Public Health, which have come within the cognisance of the Department during the two years under review, leaving for a later Report a consideration of the Vital Statistics obtained by the registration of Births and Deaths and the general indications they give of the health of the people of the Colony.

The Annual Health Report should cover the entire administration of the Health Department, but, in making such a Report, the Medical Officer of Health is handicapped, as he is in no sense the responsible Official Head of that Department, but, in theory, merely an Advisory Officer, so that he sees but one side of the work, with much of which he is not in direct touch, and knows of only at second hand. The present Report, therefore, is not to be taken as a complete outlook of the work and activities of the Health Department, but is merely an account of that section of Public Health work coming directly under the control of the Medical Officer, supplemented by such information as he may have acquired in the course of giving advice or in making inspections.

It is a pity that no complete Annual Report of the administration of the Local Government and Public Health Branch is published, for I am confident that if the public were made acquainted with the scope and value of its administration, great benefit would result by leading to a better appreciation of its aims, thus inducing a wider acceptance by Local Authorities of its advice and assistance.

Apart from the Section performed by the Medical Officer of Health, which mainly consists of dealing with Infectious Disease, the work of the Local Government and Health Branch of the Colonial Office falls broadly into two main groups, the one consisting of the administration of matters directly affecting the Public Health, including the care and detention of Lunatics, the finding out and segregation of Lepers, the treatment of Syphilis, the

care of Indigent Sick and the control of State-aided Hospitals; and the other of the supervision and advising of Local Authorities in the performance of the multifarious duties with which they are entrusted under the many Acts dealing with Local Self-Government.

It is only in regard to matters in the first of these groups that any Annual Reports are made, these taking the shape of the Report on Hospitals and Asylums and the Report of the Medical Officer of Health for the Colony, but that other large group of subjects which relate to Local Government remains unchronicled. That such a Report would be of interest and value to Local Bodies, would serve to remove sources of misapprehension between the Central Authority and Local Authority, and would bring them into closer touch with the aims and work of one another, there can be no doubt.

Necessity for Additional Government Medical Officers.

So far as the seeking of expert advice from the Government and the quickening of interest in matters of Public Health are concerned, there is evidence in the great increase in the number of calls made upon the Office of the Medical Officer of Health by Local Bodies for his assistance and advice. So numerous have these become that, with our present Staff, many applications have to be refused, and many more have to be kept long waiting before they can be attended to; indeed, there is ample work for several Additional Medical Officers were they available.

In this connection, it may not be out of place to draw attention to the fact that, at the present moment, with the exception of occasional assistance from Plague and other Temporary Medical Officers, and of a Bacteriological Assistant, the entire work of this Office is conducted by the same Professional Staff, namely, the Medical Officer of Health and the Assistant Medical Officer of Health, as was considered necessary so far back as 1895. Yet at that time, compared with the present, the Public Health of the Colony received but scant public attention, while during the eleven years that have succeeded, the White population has increased by about fifty per cent. and the Coloured by nearly twenty-five per cent., new laws affecting Public Health and Sanitation have been passed, and new interests and activities have been created and permeate all sections of the community.

It is satisfactory to note that the Government has decided to make provision on the new Estimates of Expenditure for the appointment of an Additional Medical Officer to this Office, and I entertain the sincere hope that Parliament will recognise the need for this additional assistance.

2. THE LOCAL AUTHORITY.

Powers of the Central Health Authority.

While, however, there is evidence that Local Authorities, generally, are beginning to accept the advice of the Central Authority in health matters, it must be admitted that, in general, they display a strong disinclination to submit to any sort of control or supervision by the Government, however mild or reasonable such supervision may be. It is, of course, natural that every Local Body should prefer to manage unfettered its own concerns. This is the very essence of Local Self-Government, but it does not necessarily follow that entire independence and the absence of all external control is

best in the interests of good Local Government or of the public generally. Local Bodies are liable to err from several causes, chief among which is the limitation of their powers and knowledge to the area immediately under their own jurisdiction and the absence of technical and experienced assistance. Only a properly equipped Central Authority can satisfactorily supply these wants and is able to co-ordinate the work of the different Local Authorities into one homogeneous whole. It is obviously impossible for the average Local Authority to dispose satisfactorily of many of the matters falling under its jurisdiction without reference to the effect its action may have beyond the local limits of its own area, or to deal effectually with others, such as the prevention and suppression of infectious disease, the carrying out of large water and sanitary schemes, or the provision of satisfactory means of transport, unless its efforts be co-ordinated with those of other Local Authorities, and, to some extent, guided by some Central Authority. Moreover, even in matters of purely local concern, the liability to error and wasteful expenditure can be materially lessened by reference to an impartial outside Authority.

But, as a fact, the Central Authority in this Colony possesses very slight and nebulous powers of control over Local Bodies, and such powers as exist are mainly of an indirect character, and are practically covered by the following list:—Before a Local Authority can bring into force Bye-laws or Regulations within its District, they have to receive the sanction of the Governor. In the case of certain Local Authorities, such as Divisional Councils, their expenditure has to be subjected to a Government Audit. If a Local Authority wishes to obtain a loan under the Local Works Loans Act, it has to satisfy the Government as to the necessity and the suitableness of the proposed scheme and of its financial stability. Under the Public Health Amendment Act, 1897, contributions towards the suppression of certain infectious diseases can be claimed by Local Authorities from the Government, and as a consequence of such contributions the Government attempts to insist upon some measure of control. Under the Municipal Act, the Governor has certain limited powers to do such things, as altering the boundaries of Municipalities, sub-dividing Municipalities into Wards, and fixing the number of Councillors.

Again, there are a few other matters to which the sanction of the Governor or the Minister has to be obtained before the Local Authority can enter upon them, such as the inception of new drainage or water schemes, when these are intended to be carried out under the provisions of the Public Health Amendment Act, and the making of new roads under the provisions of Act No. 41 of 1899.

Compulsory Powers.

But practically the only powers of a definitely compulsory character are provided under the Public Health Amendment Act, 1897. Under this Act, Urban Local Authorities are required to make regulations regarding certain elementary matters of sanitation, namely, for the suppression of nuisances and the preservation of the public health, for compelling residents to keep their premises free from offensive, infectious or unwholesome matters, for the protection of water from pollution, which the public have to use for drinking purposes, and for regulating the killing of animals, the sale of butcher's meat, and the supervision of slaughter-houses. In the event of a Local Authority failing to make such

regulations, the Governor may, under certain conditions, proclaim to be in force within the area of the Local Authority such regulations as he may deem to be necessary. It is only upon such regulations being brought into operation that any compulsion devolves upon the Local Authority of the District to attend to these important sanitary matters, and only then can the Governor step in and require the Local Authority to attend to them, and, in the event of it failing to do so, he may authorise any person to take the necessary measures for dealing with them at the expense of the Local Authority in default, provided, however, that in no case shall the expenditure so incurred at the cost of a Local Authority in any one year exceed the ridiculously small sum of £100. It may be added that no action can be taken by the Governor without having first sought the advice of the Colonial Medical Council, and the matter must be laid before Parliament at its next ensuing Session.

Slight as are these compulsory powers, they have been so vehemently resisted by all Local Bodies that, up to this time, they have never, in a single instance, been acted upon, and indeed only very rarely has a Local Authority been threatened with such action, and in the latter case generally ineffectually.

The Standard Regulations.

Thus even in the primary matter of the adoption of suitable regulations under the Act, this, at the present time, after the lapse of eight years, has not yet been done by many Local Authorities. Some years ago the Department drafted a series of Standard or Model Regulations, dealing with the elementary subjects above-mentioned, and suitable for adoption by all Urban Local Authorities throughout the Colony. Yet, although the Government has advocated their adoption by all means in its power, short of actual compulsion, at the present time 17 Municipalities and 60 Village Management Boards have failed to adopt them, and of those which have adopted them, only 38 Municipalities and 4 Village Boards have adopted the complete series. The Local Bodies, which have so far refused to accept them, include many of the largest towns as well as the smallest villages.

The Draft Public Health and Municipal Bills.

I have alluded somewhat fully to this matter of Central Control, in view of the Draft Bills, the one to amend the Public Health Acts and the other the Municipal Acts, which have been published by the Government and circulated among Local Authorities and other Bodies for information and comment. Considerable exception has been taken by many of them to these proposed measures, and more particularly to the one dealing with the Public Health, mainly on the ground that it confers compulsory powers upon the Central Authority, and would, therefore, it is alleged, tend to curtail the autonomy of the Local Authority. The Bill, however, extends but slightly the powers already possessed by the Central Authority, its effect being principally to define and amend those powers, which itself is only a subsidiary object of the Bill, the main object being to increase and improve the means for dealing with infectious disease and sanitary problems by Local Authorities. It is, indeed, difficult to conceive a Central Authority endowed with lesser powers than those provided by the Bill and yet

to remain an authority at all. The tenour of the objections made by Local Authorities to the Bills, in fact, indicates that the fundamental feeling underlying the whole is a rooted dislike to any form of Central Controlling Authority whatever. Objection to a Central Authority at all, if stated, would be a perfectly understandable position, but the suggestion to create a Central Authority and then endow it with absolutely no powers whatever appears to me to be a proposition difficult to maintain.

Compared with the powers and restraints exercised over Local Authorities in England by the English Government, in the capacities of the President of the Local Government Board, the President of the Board of Trade and the Home Secretary, the powers I have mentioned are merely insignificant. Yet, in England, it might be inferred that there was less need for the control or guidance of Local Authorities, where these bodies are, in most instances, old-standing Corporations, working on lines of long precedent, and possessing vested interests, in many cases, of considerable antiquity, and are wealthy, and have access to the best expert advice in all things.

Some Examples of Municipal Shortcomings.

But there can be no doubt as to the capacity of the average Local Authority in this Colony to carry out its duties being far behind that of the average Authority in the United Kingdom. It is not necessary here to enter into the causes responsible for this: they are many and most of them are more or less obvious. It may, however, not be out of place to furnish one or two facts, in order to illustrate the extent of the backwardness of many Local Authorities in this Colony. Thus, in a certain village, over which a Municipality presides, the most rudimentary sanitation has, in the past, been almost entirely neglected, with the result that infectious disease has prevailed, an unnecessarily high death-rate has existed and many sanitary evils, such as overcrowding and the accumulation of filth have persisted. Enteric Fever, alone, for the past three or four years, has been annually attacking over two per cent. of the entire population. These facts having been reported by the District Surgeon, the Council was asked to take the matter into consideration with a view to bringing about improvement. But no improvement resulting, the Magistrate was instructed to press the matter home, and he then reported to the Government that no progressive or qualified person would have anything to do with the Municipal Council, that one Councillor owned a large block of buildings with a number of tenements and *Nachtmaal* or farmers' rooms, which were frequently occupied, but which were provided with no sanitary conveniences whatever, and had but one small yard common to the lot. That two other Councillors, one of whom was the Mayor, and who were partners in business, owned a large block of buildings of a similar character. That a third Councillor had not the necessary qualification to be a Councillor required by the Municipal Act, but had been elected merely for the purpose of forming a quorum in the Council, and that the remaining Councillor was a farmer, who resided outside the limits of the Municipality, and never attended any meetings of the Council. Therefore, out of the five Councillors, two were disqualified from being members, and the remaining three owned almost half the village, and by far the greatest number of tenements in the village. "Under these circumstances," remarks the Magistrate, "can it be wondered at that sanitary and other matters pertaining to the Municipality are disgrace-

fully neglected. If members of the Municipality were to exert themselves a little more and render the District Surgeon and Police some assistance, matters might improve, but as three of them own the greater portion of the village, and have innumerable small tenements with absolutely no conveniences or sanitary arrangements, the present state of affairs will continue until these are abolished and proper habitations built."

In the case of another Municipality, an old-established one, possessing a population of over 11,000, when it recently became necessary to extend its boundaries so as to include for sanitary and health reasons a populous area on its border, the Commission appointed to enquire into the matter reported that, although they were strongly of opinion that the area in question should be included within the boundaries of this Municipality, yet its Council had so persistently neglected its duties in the past that the Commission considered it would be inadvisable and unfair to place the area under the control of that Council, and, therefore, recommended the establishment of an independent Village Board.

In the case of another old-established Municipality, with a population of over 10,000 inhabitants, the death-rate has been so enormous and the sanitary conditions so bad, that time after time it has been specially visited and reported upon by the Government Medical Officers; yet, in spite of every effort to bring about improvement, matters remain now practically the same as they were years ago: cesspits abound, there is no system of nightsoil removal, the water-supply is grossly polluted, and overcrowding and insanitary conditions widely prevail, so that even their own appointed Medical Officer of Health not infrequently writes to me almost despairing of the ultimate possibility of obtaining improvement.

Instances such as these could be multiplied, but the above are sufficient to demonstrate the need for the exercise of guidance and control by some higher and impartial Authority.

Difficulty of Controlling Expenditure under Section 38 of Act No. 27 of 1897.

It may not be out of place to here allude to the costliness and ineffectiveness of the control exercised by Government over measures for preventing and suppressing outbreaks of infectious disease throughout the Colony. In the carrying out of such measures, the Local Authority is the body primarily responsible for the duty, but the Government essays to direct, control and co-ordinate this work, exercising these functions partly by tendering advice and partly, in the case of Small-pox, Diphtheria and Plague, by reason of the provisions of Section 38 of the Public Health Amendment Act, 1897, which empowers Local Authorities to obtain from the Government, in respect of these diseases, a refund not exceeding four-fifths (and, if the disease has been brought by sea or rail, the whole) of any expenditure as shall be proved to have been expended in a satisfactory manner and in accordance with regulations framed from time to time by the Governor. The cost of all other diseases falling under the Public Health Acts has to be defrayed entirely by the Local Authority dealing with them.

In actual practice, it results that Small-pox is dealt with by Local Bodies fairly vigorously and chiefly at the expense of the Public Treasury; Diphtheria less vigorously and also chiefly at the expense of the Public Purse; Plague is entirely looked after by the Government, the whole expenditure being borne by the Treasury,

this being found the most efficacious and the most economical basis on which to deal with this disease. Leprosy, also, is entirely controlled by the Government and paid for out of the Public Funds, acting under the provisions of the Leprosy Repression Act. But of other diseases provided for under the Health Acts, such as Enteric Fever, Scarlet Fever, Puerperal Fever and Tuberculosis, they are practically not dealt with at all, except by certain few Local Authorities, who are more advanced or energetic than their fellows. In other words, the extent of the Local Authorities' activity in dealing with infectious disease, is mainly dependent upon the financial assistance which they receive from Government.

Yet, as a principle, there can be no question but that it is highly unsatisfactory for one body to spend money which another body has to provide: the entire absence of salutary responsibility leads to extravagance and waste.

The principle is based on the theory that certain infectious diseases more than others are of national importance and may be brought into local areas from without, and that they are unaffected by local sanitary conditions, while certain other infectious diseases occur primarily within a local area, often arising out of improper sanitary conditions existing in the area, and that such diseases do not endanger the health of the rest of the community at large. But it need hardly be said that all infectious diseases, whatever their nature and wherever or however they occur, are a menace to the rest of the population of the country, although it may be granted that some are spread more readily than others, and some are more affected by sanitary defects and maladministration. But, even were the distinction more marked than it is, the principle has not been applied by the Act in a proper manner, for of all infectious complaints Diphtheria may be taken as the type of disease which is to a great extent dependent on insanitation, and any burden resulting from its outbreak should be borne by the Local Body at fault, yet four-fifths of expenditure incurred by Local Authorities in dealing with this disease has to be defrayed from the Public Treasury. On the other hand, as an example of the opposite condition, Scarlet Fever may be quoted, which is a highly infectious complaint, spread from infected persons and things and not greatly affected by mere sanitary conditions, and is excluded from the operation of the Section. Moreover, it is not clear why the Local Authority should be relieved of all expenditure if the outbreak be introduced by sea or by Government railway, only in the case of some diseases and not in others.

The liability of the Public Treasury under this enactment is considerable, and the control of expenditure and the keeping of it within a reasonable amount constitute a most difficult task. There is only one means by which it could be effectually controlled, which is, by laying down as an inviolable rule that all such expenditure must have been definitely authorised in each case by the Government *before* being expended by the Local Authority, and a rule of this kind has been laid down, both by regulation and by official circular instructions. But, in practice, it is found impossible to adhere to it, for it is usually ignored by Local Authorities, who insist, and with some reason, that it is impossible to wait for authority before incurring necessary expenditure, while an epidemic is spreading. In actual practice, therefore, a large proportion of the claims for refund consists of expenditure which has been incurred without any previous official sanction having been obtained, and which, in spite of broken rules, has eventually to be paid by the Government.

Proposed Amendment of Section 38 by the Draft Public Health Bill.

In view of our experience in this matter, it is considered imperative to provide for the amendment of Section 38 in the Draft Public Health Bill, and, accordingly, provision has been made that no proportion of any amount expended by a Local Authority shall be paid out of the Public Treasury until the Governor is satisfied—

- (a) That it is desirable and reasonable to pay such amount or any portion of it out of the Public Treasury;
- (b) That no portion of such expenditure was rendered necessary by any act, default or omission on the part of the Local Authority to carry into effect proper sanitary measures within its District;
- (c) That no portion of such expenditure was in respect of any service, matter or thing which the Local Authority would have been called upon to defray in the ordinary course of its administration and in the absence of measures for preventing the spread of the disease; and
- (d) That the Local Authority has not charged in respect of services which the Local Authority gave, or could reasonably be expected to have given, without any extra expense to such Local Authority.

As these proposed amendments have been vigorously opposed by the majority of Local Authorities throughout the Colony, it seems advisable to briefly state the grounds on which the proposal to make them is based.

Amendment (a) is required in order to deal with those cases where Local Authorities have incurred extravagant and unreasonable expenditure without the sanction of the Government, and which, under the existing Act, the Government *is required* to refund out of the Public Treasury.

Amendment (b) is rendered necessary owing to the fact that, in many cases, outbreaks of disease have occurred and great expenditure resulted from the Local Authority having neglected the carrying out of its ordinary routine duties. Thus, for example, outbreaks of Diphtheria have resulted from sanitary defects to which the Municipality has had its attention drawn, but has, nevertheless, neglected to remedy, and severe epidemics of Small-pox have taken place, owing to the Local Authority having neglected to take any precautions when first notified of the occurrence of a case of the disease in its District.

With regard to amendment (c), this is necessary as it has been frequently found that Local Authorities, on the occurrence of an outbreak of disease falling under Section 38, have charged the Government with the cost of the whole of their ordinary Sanitary Staff, which, but for the occurrence of the outbreak, it would have paid itself.*

Finally, with regard to amendment (d), this is necessary as many Local Authorities have considered it reasonable to charge the Government with expenditure for ordinary services which has cost the Local Authority itself nothing. Thus, for example, claims have

* As an instance of this the case may be mentioned of a large Municipality where, upon Government notifying its intention not to defray the salaries of the Council's ordinary sanitary staff, for which a claim was made by the local authority on the outbreak of the disease, this staff then dealt with Small-pox only after official hours, and the Government was charged with large amounts for overtime incurred in this fashion. Cases of the disease notified during office hours were left over until the night-time, so as to be dealt with as overtime.

on occasions been made for water supplied by the Local Authority to the patients under treatment for Small-pox.

Examples of Excessive Expenditure by Local Authorities under Section 38.

It will be of interest to give a few examples of the actual expenditure which has been incurred by Local Authorities in dealing with outbreaks of Small-pox, and for which the Local Authority has come to Government for a refund of four-fifths or of the whole. In giving these examples, I do so without mentioning names, as, while I am desirous of shewing the enormity of some of the expenditure, I do not wish to publicly fix the sin on the particular Local Authorities, the more so as these are only examples of what is occurring, more or less generally, throughout the Colony.

A Native labourer had come up to Simon's Town from a small town in a South-Western District in search of work. He returned to his home on the 8th August, suffering from Small-pox, which fact was discovered immediately on arrival. He was dealt with by the Local Authority, and died eight days later, on the 16th August. In dealing with this one case for a period of eight days, the Municipality expended a sum of no less than £295 9s. 3d., and it may be interesting to indicate some of the items on which this money was spent. The Council isolated and treated the patient for eight days, they also quarantined eight other persons, who had come in contact with him at his home. These eight persons were quarantined for a period of thirty days. Of course, the patient, in travelling from Simon's Town by rail and on foot, came in contact with many other persons, but these the Local Authority did not deem it necessary to deal with. It may be also mentioned that the incubation period of Small-pox is usually twelve days, and fifteen days after the last exposure to infection is usually considered the extreme period during which it is necessary to keep a person under observation. The Medical Officer in charge was paid a fee of three guineas per diem for the whole period of one month. He was also provided with transport, although the place of isolation was in close proximity to the town, and at the conclusion of the outbreak he was supplied with a complete outfit of new clothing. Six guards were employed and one male nurse, the guards being armed with shotguns, hired at a cost of 2s. 6d. per week each. The patients and the guards were fed upon the best, and in the course of the month consumed over a dozen bottles of brandy, part of which was Hennessy's Three Star. A sum of £7 10s. was paid for transport, chiefly of food supplies. Handsome gratuities were given to the Town Clerk, Town Overseer and other regular employes of the Council. Finally, everything that it was possible to destroy was destroyed, and the owners were not only compensated but also had the goods replaced by new ones by the Council. Thus, these poor Coloured persons, who were quarantined, were compensated as follows:—One received compensation for clothing amounting to £8 9s. 9d., and a complete new outfit costing £2 9s. 6d., including even a set of shirt studs. Another person received compensation amounting to £9 2s. 11d., and a new outfit costing £3 2s. 3d. Another, compensation amounting to £8 11s. 9d., and a new outfit costing £1 6s. 6d. Another person, compensation amounting to £15 8s. 9d., and new outfit costing £3 3s. 3d. Another, compensation amounting to £4 1s. 9d., and a new outfit costing £2 0s. 3d. While even the deceased patient's mother received compensation amounting to £4 2s. 6d. for his clothing, which was destroyed. Articles of exactly the same descrip-

tion as those destroyed and compensated for, were also replaced free of charge to the claimants, so that they were virtually compensated twice over, getting new lamps for old and being paid for the old lamps as well. Among some of the items paid for may be mentioned the following articles, all being of the more or less valueless description usually owned by low-class Coloured persons:—3 old sacks, 1s. 6d.; 1 hat, 4s.; 1 hymnbook, 2s.; 5 old tins, 1s. 3d.; 1 notebook, 1s.; 1 bunch of flowers, 6d.; and numbers of other instances of a like kind.

While the Municipality was uselessly expending these large sums, the only successful means of combatting Small-pox was being almost entirely neglected. In the course of this outbreak only fifteen persons were vaccinated, and these were the eight contacts, who were under quarantine, the six guards, and the one nurse. No general vaccination was undertaken. The Municipality asked the Government to pay the whole of this disgraceful expenditure of £295 9s. 3d., and, after a prolonged wrangle, the Government was finally forced to contribute one-half of it.

In another small Municipality, the Government contributed, on the £ for £ principle, to the erection of a Small-pox Lazaretto. This building the Council has let to a permanent tenant at a comfortable rental, the whole of which it appropriates to itself, while it has claimed from the Government the cost of providing other accommodation for treating cases during an outbreak of Small-pox which has recently taken place in its District.

Some years ago, one case of Small-pox occurred in a Coast town. The occurrence cost the Government over £800.

Recently an outbreak of Small-pox occurred in one of the Coast towns, sixteen cases of the disease resulting, fifteen of whom were treated in the Small-pox Hospital; the remaining case provided for his own treatment at home. The Local Authority incurred expenditure in dealing with this outbreak amounting to £756, or an average cost of £47 5s. per patient.

This may be contrasted with the expenditure incurred by the Kimberley Board of Health in connection with a severe outbreak of Small-pox which took place in Kimberley, when 252 cases were dealt with at a cost of £1,166, or an average cost of £4 12s. 6d. per patient.

A short time ago, in a rural portion of a District, an outbreak of Small-pox took place. The outbreak consisted of three cases, all relatives; and living on adjoining farms. They were isolated apart on the separate farms and dealt with at a cost of £74 15s. 7d.

In the District of Glen Grey, during the years 1899 to 1904, a sum of £3,634 15s. 7d. has been expended by the District Council on the attempted suppression of Small-pox. A considerable proportion of this has been expended on the useless services of "guards."

These examples are sufficient to demonstrate that this question is of importance and must, in the interests of the Colony, be dealt with. It should be pointed out that expenditure in dealing with Small-pox should not in fact be great, as vaccination forms a simple and efficient means of controlling the disease. So far as the general vaccination of the Colony is concerned, this service is carried out directly by the Government, and the entire expense is borne by the Government, and is not included in the expenditure, which I have just been discussing.

Contributions from the Public Treasury chiefly benefit the larger Municipalities.

It is one of the inconsistencies of this expenditure by Government on Small-pox that a very large proportion of it goes to assist rich Local Authorities, who might very reasonably be expected to meet such expenditure out of their ordinary revenue, while only to a minor extent does it go to the small Local Body. In the examples I have given above, the cases have been chiefly drawn from among the large Municipalities.

These facts are well illustrated by an analysis of the Small-pox expenditure for the Colony taken over an extended period. Thus, during the last five financial years, 1900-05, the Local Authorities of the Colony, excluding those in the Native Territories, expended on the suppression of Small-pox a sum of £47,898, of which amount a sum of £37,680 was refunded out of the Public Treasury under the provisions of Section 38 of Act 27 of 1897. During this period* 6,412 cases of Small-pox were discovered in the Colony, excluding the Native Territories. Therefore, the Government contributed an average of £5 17s. 6d. per case discovered. This average, however, is somewhat misleading, as the greater portion of the expenditure was incurred by the larger and wealthier Local Bodies, although only a small number of cases occurred in their areas. Thus, for example, of the £37,680, as much as £9,884, or more than 26 per cent. of the whole, was contributed to the Municipalities and Divisional Council of the Cape Peninsula. In this area, however, only 365 cases were discovered during the period, so that the average contribution from the Public Treasury per patient in this small area amounted to the very excessive sum of £27 1s. 7d., as compared with an average of £4 11s. 11d. for the rest of the Colony.

It may be pointed out that this £37,680 does not represent the whole of the expenditure borne by Government for the prevention of Small-pox, as during the same period it paid £5,268 in respect of the Native Territories, where 2,499 cases occurred, and it met the entire cost of public vaccination throughout the Colony, amounting to £15,251.

Municipal and other Local Bye-laws.

Another matter in which Local Bodies appear to desire freedom from outside control is in that of the framing of Bye-laws or Regulations. It is provided by statute that, before these can become law, proclamation with the sanction of the Governor is necessary, but it is considered by Local Authorities that if the bye-law be such as can be legally framed under the powers of the Local Authority, sanction should in all cases be given, irrespective of whether the bye-law is reasonable or is desirable in the public interests. The idea appears to be that the Local Authority is a sort of "Local Parliament," which legislates for the area under its jurisdiction, and that, subject to the legislation which it frames being within its powers to frame, submission for the Governor's sanction is a mere formality. Apart, however, from the fact that a Local Authority—a Village Management Board, for example—is far from being a Local Parliament having legislative

* This period is not quite the same, being for the five *calendar* years ended on the 31st December, 1904, whereas the expenditure is taken over the five *financial* years ended on the 30th June, 1905, or six months later, but as the expenditure is not brought to account for a period of several months after being incurred, cases and the expenditure are virtually for identical periods.

functions, it is certain that bye-laws are required by statute to be submitted to the Governor, not for mere form's sake, nor simply for the purpose of ensuring that the procedure in the framing of bye-laws required by statute has been duly observed, nor merely for ascertaining whether the bye-laws are legal or otherwise, but on account of the great principle underlying the sanction of the Governor, which is that of ensuring that every bye-law is reasonable, that it is for the public good, that the lawful rights of the individual are respected, that it is not uncertain, unjust or oppressive, and, generally, that it is in the interests of public polity.

But to enable the Governor to exercise this function, it is necessary that bye-laws should be subjected by the Government to careful examination and criticism before they are finally submitted to the Governor with the Ministers' recommendations. For this purpose it is not only necessary that proposed bye-laws be examined by the Government Law Officers, but also by the Government Expert Officers in other branches of Municipal work, such as public health, sanitary engineering, finance, and the like, which may be affected by the proposed bye-law. Finally, the Officers of the Department specially experienced in the work of Local Administrations must report generally on its suitability and workableness.

This work would necessarily entail time if proposed bye-laws were ordinarily submitted in a satisfactory and workmanlike form, but, as a fact, the majority of them are forwarded to Government so roughly drafted, so badly arranged, and with so little information essential for their proper consideration, that the work of the Government is enormously increased. It is, indeed, no uncommon thing to have a set, consisting of many hundreds of regulations, submitted for revision, numbers of which are either *ultra vires*, or are unnecessary, being already provided for by existing statute law, while the whole of the regulations overlap and contradict one another, and are so badly drafted as, in many cases, to be utterly incomprehensible, so that before such regulations can be finally passed they often have to be entirely re-drafted and during the process to be returned many times to the Local Authority for reconsideration, which reconsideration, is, unfortunately, not always accorded in the most reasonable spirit, for Local Authorities tend to become wedded to regulations, however faulty and impossible they may be, the moment they have been adopted by them. Obviously all this occasions delay, which is frequently resented by the Local Authority concerned, and the matter thus becomes still further hampered.

There can be no doubt that by its action in dealing with new regulations during the past dozen years, the Government has succeeded in bringing about a vastly improved standard of local legislation, which is well worthy to stand as a record of the value of the Department's endeavours, but, nevertheless, it has also tended to interfere with the good relations existing between the Central and Local Authority to an extent which one cannot but deplore. And still a great deal yet remains to be accomplished before the present tendency of Local Authorities to submit and obtain the sanction of the Governor to unworkable and drastic bye-laws is checked. It would appear that many Local Authorities consider that the best means of dealing with any difficult problem relating to the public, a drastic bye-law regulating the matter, which, as soon as it is proposed especially such as affects sanitation and health, is by the framing of claimed, is expected by its mere existence and without further action on the part of the Local Authority to bring about the necessary improvement. I am confident that the public, generally, is quite un-

aware of some of the astonishingly arbitrary and drastic powers at present in force in Local Areas in the form of bye-laws; powers which Parliament itself, I am sure, would hesitate to place on the Statute Book, and, indeed, which would cause universal indignation were they actually put into force. The bye-law, therefore, remains a dead letter and matters continue much as they were before.

Little improvement in this direction is likely to result until more definite and adequate provisions are made by law for enabling the Government to deal with Draft Bye-laws and Regulations submitted by Local Authorities. Some such provisions have been incorporated in the Draft Municipal and Health Bills, and if they become law will, it is hoped, place this matter on a greatly improved basis.

The duty of dealing with Municipal Bye-laws does not fall within the scope of this Office, except in so far as such bye-laws are referred to the Medical Officer of Health for scrutiny and advice on public health and sanitary matters, but as these subjects form by far the greater portion of local bye-laws, it follows that the Medical Officer of Health is fairly well acquainted with most of the facts relating to this branch of the work of the Local Government and Health Branch. I furnish the figures contained in the following Table in order to indicate the extent of this work during the past two Calendar Years 1904 and 1905:—

Return shewing the Number of Regulations Promulgated by the Colonial Secretary's Department during each of the Years 1904 and 1905.

Description of Regulation.	Promulgated.	
	1904.	1905.
Municipal	1,775	1,977
Village Management Board	142	74
Divisional Council... ..	9	37
Cemetery ... ..	...	54
Total	1,926	2,142

3. THE GENERAL SANITARY OUTLOOK IN 1904 AND 1905.

Although, as has been already remarked, Local Authorities generally are displaying increasing appreciation of the great importance of their duties in regard to sanitation and the protection of the public health, and although many of them are gradually effecting improvements in the condition of the areas under their control, nevertheless, at the present time, the sanitary condition of the majority of up-country towns is far from being satisfactory, and, what is worse, many Local Authorities are still apathetic regarding the subject, so that the prospect of immediate improvement is not hopeful.

No material progress in the sanitary condition is likely to result until Local Authorities generally, and, in the case of Urban Authorities, always, retain the services of a local Medical Officer of Health.

Yet the number of Local Authorities who employ such an official, even in a merely consulting capacity, remains extremely small, being in 1905, only 43, while only three Authorities in the whole Colony employ a wholetime Medical Officer; namely, the Municipality of Cape Town, the Board of Health of Kimberley, and the Municipality of Port Elizabeth, and even in the latter case, I understand that, owing to the necessity for retrenchment, the abolition of this Officer, at the conclusion of his present term of appointment, has been under consideration.

Even when we come to the minor but still most important official, the Sanitary Inspector, a large number of Urban Local Authorities throughout the Colony do not employ any such Officer, and in many cases where a Sanitary Inspector is appointed he is burdened with other duties, which prevent him giving proper attention to health matters. Moreover, in many of those cases where Sanitary Inspectors have been appointed the incumbent has but little knowledge or experience in the technical portion of his duties.

Annual Reports of District Surgeons and Local Authorities.

Printed with this Report will be found the usual Annual Health Reports of District Surgeons and Local Authorities, which deal with the sanitary condition of their respective Districts during the past two years. A perusal of these Reports will serve to shew what has been done in the way of improvement during that period and how much yet remains to be accomplished.

The advisability of the system of printing these Reports *in extenso* has, on occasions, been called in question, on the ground that the expenditure involved is not warranted by the information which they contain. I think, however, this criticism is passed without a full knowledge of the circumstances of the case, for the value of these Reports lies not so much in the information which they contain—which, in itself, is not inconsiderable—but in the fact that the collection of information and the preparation of the Report annually draws the attention of Local Authorities and others to the sanitary condition of their area, and thus tends to promote efforts for improvement which otherwise would not be likely to be aroused. The making of these Reports also gives the District Surgeons an opportunity of getting into touch with Local Authorities and with local conditions, so that numbers of improvements could be instanced which have directly resulted from these Reports.

While, on the one hand, it will be seen from the Reports that, in many Urban communities, the same sanitary defects continue to exist year after year, such as insufficient, impure and improperly protected water supplies, unsatisfactory arrangements for the removal and disposal of night-soil and other refuse, overcrowding, absence of proper arrangements for slaughtering and for the supervision of the preparation and sale of food, insufficiency of control over the erection of dwellings and new buildings, insanitary condition of locations, and a number of other matters, the Reports also shew that during the two years under review numerous improvements have been effected, in many cases of importance, and in all cases indicating increased sanitary activity.

Effects of Epidemics in Improvement of Sanitation.

Many of these improvements have been the direct outcome of the experience by the community of severe outbreaks of infectious

disease, which, in this respect, have often proved to be blessings in disguise. Thus, for example, in the Municipalities of Hanover and French Hoek, suitable schemes for the supply of their inhabitants with pure drinking water have resulted from severe outbreaks of Enteric Fever which have visited these villages in the past, accounts of which have been given in former Annual Reports. In the case of French Hoek, where the intention was to erect a Town Hall, this improvement took its place and was entirely forced upon the Municipality by the occurrence of a very severe outbreak of the disease, which threatened to permanently injure its prosperity as a scholastic centre.

But, perhaps, one of the greatest factors in bringing about general sanitary improvement in the Colony has been the outbreaks of Bubonic Plague. This effect has been particularly noticeable in the towns where large and comprehensive cleansing schemes have been carried out by the Government, in the course of which a great number of insanitary and unhealthy dwellings has been demolished or re-constructed. As examples of this, we may quote the enormous improvement which occurred in Cape Town in the year 1901, consequent upon the outbreak of Plague, which not only effected the permanent exclusion of Natives from residence in the town and their settlement in locations at Maitland and in the Dock area, but led to a generally improved sanitary control over the City. Thus, much of the dangerous overcrowding, which had been taking place, chiefly in Districts 6 and 2 of the City, was done away with. In Port Elizabeth, again, a vast improvement has taken place by the same means, a great amount of slum property having been abolished or improved, and the large Native population expelled beyond its borders. Unfortunately, however, although provision was made by the Government for the housing of these displaced Natives by the establishment of the New Brighton Location, owing to the absence of adequate extra mural sanitary powers, the migrating Native and Coloured population have established insanitary communities beyond the boundaries of the Municipality at Korsten and other places. At East London and King William's Town, where Plague also occurred with some severity, and comprehensive schemes were undertaken by the Government, the same improvement has been witnessed.

In all these cases the effect of the sanitary measures has been demonstrated by an almost immediate decided drop in the rate of mortality of the town. Thus, in Port Elizabeth, the drop has been, in the case of the European population, from 18.98 per thousand in 1902 to 12.96 in 1905, and of the Coloured, from 98.24 to 32.96 per thousand. In East London, the rate has fallen from 1902 to 1905, among Europeans, from 15.54 to 13.27, and among Coloured, from 25.82 to 17.83 per thousand.

Water Supplies.

The two most common and, at the same time, most important, needs of Urban areas in this Colony, are pure and adequate water supplies and proper means for the disposal of night-soil.

With regard to the former of these, each year sees some improvement effected in the water supplies of some of the towns, and although improvement does not take place as quickly as could be desired, there is the satisfaction of knowing that such improvement as is made is usually of a permanent character.

During the period under review, the Municipality of East Lon-

don has been causing systematic investigation to be made into possible sources of supply for meeting the increased needs of the town, and there seems to be every reason to expect that a satisfactory scheme will be obtained before long from the Wolf and Gulu Rivers.

During the same period, the Municipality of Aliwal North have greatly improved their water supply, and have in connection therewith introduced a system of electric lighting. It may be mentioned that this Municipality has been displaying a remarkable activity in the effecting of improvements in almost every branch of Municipal undertaking.

Also, the Municipality of Worcester has made considerable progress towards obtaining a reliable and sufficient supply of water for the town, instead of, as heretofore, satisfying their wants from the Hex River. The rights to an ample water source have been purchased and a scheme for bringing it to the Municipality has been elaborated.

In the Cape Peninsula, the Suburban Municipalities lying between Cape Town and Wynberg, including that of Maitland and its surrounding areas, still remain in the dangerous position of having a totally insufficient water supply. It is probable that a proper supply could have been obtained long ago if all the Local Authorities of the Peninsula had from the first set aside purely local considerations and co-operated with one another in dealing with this vital matter. For the safety of these communities it is to be hoped that progress will soon be made in solving this difficult question. Until an adequate supply of water is obtainable, it is impossible to undertake a proper system of sewage disposal, and, in the meantime, these Municipalities are also suffering greatly from this cause.

At Mafeking, where the supply, which is in the hands of a Syndicate, is utterly inadequate, the Municipality is making investigations with a view to the Municipalising of this undertaking and to improving its character.

At Graaff-Reinet, where the water supply at its source is pure and abundant, no alteration has taken place, nor, indeed, appears immediately likely to take place in the present dangerous system under which the supply is distributed through the town after being brought to its confines in cement pipes. This distribution is made by open furrows running along the streets, from which furrows open tanks dug in the ground, or brand-dams, are fed, and from which the inhabitants obtain their supplies as best they can. During its course the water is subjected to pollution of the most gross and disgusting kind, both by surface drainage and by the deliberate emptying of slops and filth into the furrows, while after reaching the tanks the water stagnates and is liable to still further pollution.

Speaking generally, it may be stated that, in a large number of towns and villages, pure and sufficient supplies of water exist within short distances, but such water is polluted by the way in which it is brought to the town through open furrows which serve, more or less, the purpose of drains for the street along which they are running as well as for the land and premises on either side. A good instance of this system, with the dangerous effects which it may cause, has already been alluded to in the case—now, happily, remedied—of the Municipality of French Hoek.

Disposal of Night-soil.

With regard to the disposal of night-soil, although a large amount of improvement has been taking place in this matter, it is

surprising how many Local Authorities still make no pretence of dealing with it in any shape or form. In others, the Local Authority does licence "night men," leaving it, however, to the inhabitants to employ them, or not, as they like. Even in some large towns, like the Paarl, no Municipal system of night-soil removal is in operation. In Graaff-Reinet there is no system of removal, and cess-pits of the worst description prevail throughout the town. In Graham's Town, the removal of night-soil is still in the hands of contractors appointed by the Municipality, instead of being carried out by the Council's own Staff under proper supervision. In very few Municipalities where the bucket system is in operation, and night-soil is removed by the Municipality, is the system in operation, under which separate and distinctive buckets are kept for use in those houses at which there are cases of Typhoid Fever or other infectious disease usually spread by the excreta, and thus the infected buckets removed from such premises are liable to be supplied to healthy households. There is no doubt that, in a number of towns, such as Queen's Town, possessing an ample water supply, a satisfactory system of water carriage disposal could be economically installed.

It is needless to say that the proper disposal of night-soil is a matter of such concern that no Local Authority can be considered to be doing its duty that does not employ the most efficient means for this purpose that are available. Much of this indifference to proper sanitation is undoubtedly due to the objection on the part of Local Authorities and ratepayers, generally, to the levying and payment of adequate rates for the purpose. That, however, this is not the sole reason is indicated by the fact that there are Local Authorities which, while neglecting ordinary sanitary measures, have expended comparatively large amounts in the erection of Municipal Offices and Halls.

Slaughterhouses.

The question of the slaughtering of cattle and the sale of meat has, during the period covered by this Report, continued, as in the past years, to claim anxious attention, especially in the case of the Municipalities of the Cape Peninsula and some of the larger towns of the Colony.

So far as I know, there is only one Municipality, namely that of King William's Town, that has as yet established Municipal abattoirs in the proper sense of the word, and here these have only just been completed at a cost of some £3,000. It is reported that they are being conducted by the Municipality on advanced lines.

A number of other local authorities claim to possess public abattoirs, but, as a matter of fact, these practically consist merely of places owned by the Municipality and let out for use to local butchers, and in many cases such publicly owned slaughterhouses, or shambles, are no better than those which belong to private individuals.

Among the Municipalities possessing public slaughterhouses may be mentioned those of Barkly East, Carnarvon, Cathcart, Maraisburg, East London, Fraserburg, Riversdale, Graaff-Reinet—in which place they are reported to be "in a filthy condition"—and Somerset East.

Several Municipalities are reported to have had the question of the erection of Municipal abattoirs under consideration. This has been the case at Grahamstown, where the matter has been shelved

for the want of funds, at Port Elizabeth, where it is hoped they will be proceeded with this year, at Oudtshoorn and at Simon's Town.

It must be admitted, however, that, in the case of many of the up-country villages, very little trade slaughtering is carried on, the practice being for the inhabitants to kill privately to meet their own and neighbours' needs. Such private slaughtering is generally performed in the backyards or other portions of private premises and not in any recognised slaughterhouse.

But, as a general rule, it may be said that the idea is to look upon slaughtering as a noisome and disgusting trade which must be relegated to some place outside the town, with the result that slaughtering is usually carried out in some most unsuitable building on some unfrequented portion of the commonage, without water supply, without drainage and without ordinary means of cleanliness, but where the disgusting condition of things, which under such circumstances usually arises, does not become a source of offence to the inhabitants, and therefore passes unheeded, and indeed, practically without supervision by the Municipal authorities themselves. Even in towns like Cape Town and Sea Point, the Municipality has decided not to permit of any slaughtering being done within its district, on the ground that the trade is necessarily offensive, and with the natural result that the slaughter-houses in which the meat for the inhabitants is slaughtered have been placed at Maitland or beyond, where the local authorities most immediately concerned are unable to exercise any supervision or control.

That the slaughtering of cattle is an unpleasant occupation is true enough, but it is not by any means the case that it need be a filthy or unwholesome trade. There is no reason why a slaughterhouse should not be conducted in the heart of a large town without any nuisance or cause of offence resulting to the immediate inhabitants from the actual slaughtering, although nuisance might arise from the driving of cattle through the streets and kraaling them before they are killed, and for this reason and for the sake of the cattle themselves, it is desirable not to establish a slaughterhouse within the heart of a city.

From a perusal of the reports of District Surgeons and Local Authorities printed in this volume, it will be seen that in a very large number of cases, slaughter-houses in the urban districts of the Colony are reported as being more or less unsatisfactory, the defects being improper construction, want of a proper water supply, and absence of suitable means of drainage, so that cleanliness is impossible.

But the chief places in the Colony in which the matter has become one of more or less urgency are the Cape Peninsula, Port Elizabeth, East London and Kimberley. With regard to Kimberley, the matter has been under discussion from time to time, but no further steps appear to have been taken. The difficulty at that place appears to lie in the fact that, while it is the Municipalities of Kimberley and Beaconsfield which are charged by statute with the dealing with slaughtering and meat inspection, it is the Board of Health which is deemed locally to be the proper body to undertake the duty.

At East London, slaughtering is chiefly carried out within the Municipality and at Cambridge. At the latter place there are four slaughter-houses, two of which have been closed owing to failure to comply with the Municipal regulations. In East London the Municipality possesses six slaughter-houses, but only two of them

have been hired by butchers during the past year, a great deal of the meat killing and dressing for the town being done outside its limits. The Council states that it does not at present contemplate establishing proper abattoirs.

The existing slaughter-houses both at Cambridge and East London have been inspected and adversely reported upon by Government medical officers.

In Port Elizabeth the slaughter-houses are reported to be quite unfit, and the Council for some time past has had under consideration the question of the establishment of public abattoirs. At Walmer, where a large portion of the slaughtering for Port Elizabeth is conducted, the Municipality has also had under consideration the question of the erection of municipal abattoirs, but has hung it up owing to being disappointed in not securing some Crown land for a site.

At Korsten, just beyond the Port Elizabeth boundary, slaughtering is also carried on under most unsatisfactory conditions.

In the Cape Peninsula.

It is, however, in the Cape Peninsula that the question has become most acute, owing to the comparatively large extent of the trade and to the disgraceful state of many of the existing slaughter-houses. These are situated at Mowbray, Wynberg, and Simon's Town; and at Maitland within the limits of the Municipality of Maitland, and in the Divisional Council area. The state of these last mentioned slaughter-houses has for years past been the subject of frequent report by myself and other Government medical officers, and has also been continuously before the public through the press and in other ways. In a report on the matter which was presented to Parliament in 1896, I gave an account of these slaughter-houses, and described the disgusting practices connected with them. Recently, in 1906, or ten years later, another inspection was made by Dr. Thornton, an officer of this department, and his report demonstrated that practically identical conditions to those I described still exist in these slaughter-houses. Yet in the interval, the local authorities of the Peninsula and other bodies have given the subject much attention, and a conference of representatives of municipalities has been appointed by them, which has sat from time to time and discussed the matter, but so far, beyond mere academic discussion, the only result has been a decision to ask the Government for further powers to deal with the question.

Powers for the Control of Slaughtering.

Nevertheless, much might long ago have been accomplished under the very considerable powers already possessed by local authorities under the Public Health Amendment Act, 1897, which enable them to erect public abattoirs, to regulate their use, prohibiting the slaughtering of cattle except in proper slaughter-houses sanctioned by the local authority and used under proper conditions, and to undertake the duty of meat inspection. Moreover, these powers are not confined to the districts of the Municipalities themselves, but may be extended to any area beyond their district wherein animals are slaughtered or meat is stored or prepared for the purpose of being sold within their districts. And, these powers have been so extended by the Government to the whole of the Cape Peninsula, and at Port Elizabeth to the whole of that district.

But it is contended that the powers that are necessary are wider than these and should be such as to enable the local authority to prohibit the slaughtering of cattle anywhere else than in a municipal abattoir, to enable local authorities to combine for the erection of such abattoirs, and to empower them to prohibit the sale of meat within their districts which has not passed a municipal inspection and been thereupon branded or marked. Pending the giving of the powers they ask for, nothing has been done to remedy the existing state of things. On the one hand, the Municipalities of the Peninsula have failed to act under the already wide powers they possess unless endowed with others more drastic and of doubtful applicability in this Colony, and, on the other hand, the Municipality of Maitland, where most of the slaughter-houses exist, has declined to take the matter in hand and erect municipal abattoirs without a guarantee that the other Municipalities will co-operate in their use; while the butchering trade itself, in the absence of definite action by the local authorities, has not thought it necessary to replace their present unsatisfactory slaughter-houses by suitable buildings, which they contend may be afterwards closed by the Municipality itself monopolizing the work.

In order to break through this vicious circle and bring the matter to a head, the Government, acting on my advice, recently informed the Municipality of Maitland that the persistence of the present slaughter-houses in its district would not be allowed and if the Council failed of itself to insist upon the carrying out of the slaughter-house regulations in force in the district, the Government would, under the powers conferred upon it by Section 8 of the Public Health Amendment Act, 1897, step in and deal with the matter at the expense of the Municipality. As a result of this intimation, the Maitland Municipality have given six months' notice to the owners of all slaughter-houses in its district to close their slaughter-houses within a period of six months, which will expire in August, 1906. And so the matter stands.

While I am strongly of opinion that all slaughter-houses, together with the slaughtering of animals and the inspection of meat, should be subjected to the most rigorous control by every local authority, I greatly doubt if, in this Colony, the time is yet ripe for the institution of a *monopoly* of all slaughtering by Municipalities and the entire prohibition of slaughtering in private slaughter-houses, nor if it is at present feasible even to brand after inspection all meat sent for consumption into all urban areas, whether in the Cape Peninsula or elsewhere. Apart from the fact that such a step would place serious restrictions upon Colonial meat as compared with imported meat to which no such restrictions could be applied, it would involve a number of issues which I think have not yet been thoroughly thrashed out by the advocates of the system.

There is no doubt that at the present time a considerable amount of diseased and unsound meat finds its way to market, but, having regard to the conditions prevailing in this Colony, I think the Colonial meat supplies could be adequately protected if a general law were properly acted upon *throughout* the Colony prohibiting the slaughtering of cattle, the meat of which is intended for sale, or preparation for sale, except in slaughter-houses approved of by the local authority of the district, and if the duty were placed upon *every* local authority throughout the Colony—with powers to the central authority to enforce its carrying out—of regularly inspecting such slaughter-houses and the cattle and meat thereat.

Coupled with these powers, urban authorities should be encouraged to establish municipal abattoirs for the use of butchers in their districts, the meat slaughtered in which could be branded with a special mark as having been killed in such abattoir and as a guarantee of its quality. I may mention that, in practice, it has been found, as in the case of Melbourne, that the establishment of municipal abattoirs on these lines, without any compulsion on butchers to use them, has resulted in the voluntary closing of all private slaughter-houses in the district.

Measures adopted in other Countries.

Although the system of compulsory slaughtering only in municipal abattoirs and the branding of all meat before it is allowed to be sold is nominally in force in some countries in Europe, it is probably only thoroughly carried out in Germany, and it is by no means certain that the results are commensurate with the restrictions and the expense involved in its enforcement.* It must also be borne in mind that it has been found necessary where the system is in full operation, on the one hand, to practically prohibit the importation of all dead meat into the country, † and, on the other, to legalise the sale, under special restrictions, of meat officially recognised as being diseased or inferior in quality. ‡

In England, no such system, nor, indeed, any approach to it, obtains, although it is generally admitted that, in the matter of slaughtering, England is somewhat behind other countries.

In America, the system of compulsory inspection is only applied by Act of Congress to all meat killed for export, this step having been taken in order to counteract the injurious effect on the American export trade caused by foreign sanitary legislation ; but only

* Under the system of inspection conducted in Germany, it is found that only 0·75 to 0·85 per cent. of all the food animals inspected are diseased or unsound, but of this amount from 0·45 to 0·75 per cent. is of such a nature as to be capable of being used for human food under special conditions. These proportions vary in different places and from year to year, but only within very small limits. These figures are, however, much below the experience of the slaughter-house at Sydney, New South Wales, where during the calendar year 1902, 59,945 head of cattle were slaughtered, 16,080 calves, 62,259 pigs and 1,166,175 sheep; of which 1,247 head of cattle, or 2·1 per cent., were condemned as diseased—the disease in 1,197 head being Tuberculosis, which is reported as being exceedingly prevalent among cattle in Australia. Of the calves, 20 were condemned as diseased, or a percentage of 0·1, and 2,100 as being of immature age. Of the pigs, 679 were condemned, 633 being on account of Tuberculosis; while of the sheep, only 841, or a percentage of 0·07, were condemned.

† Under the German Imperial Law, the importation of dead meat, except with the internal organs attached, is prohibited, and as in most cases it is a practical impossibility to keep a carcass with the viscera and offal *in situ*, it results that no importation takes place. It may be explained that the mere inspection of meat in the dressed carcass is not sufficient to enable the question of freedom from disease of the animal during life to be decided; it is in the organs and offal—lungs, liver, stomach, intestines, kidneys and spleen—that the evidence of disease has to be looked for.

‡ It will be readily understood that where inspection and the control of meat is laxly conducted or entirely neglected, a considerable amount of meat goes on to the market and is sold, generally, at inferior prices to the poorer classes by whom it is consumed.

Under strict inspection all such meat is detected, but to prohibit its use for human food would mean an economic loss which few Governments would care to insist on, it being justly considered that it is better that the poorer classes should be able to obtain this food if properly safeguarded from danger than to be deprived of it altogether. Such meat consists of animals suffering from diseases which do not necessarily render the consumption of certain portions of the carcass dangerous under proper precautions, and of inferior quality meat obtained from immature or very old animals, or those which have suffered from insufficient feeding or wasting disease.

In Germany this meat is allowed to be sold under the following special conditions:—

It can only be dealt in by meat dealers, hotels, saloons, and restaurant keepers on a licence from the Police, revocable at pleasure, and on premises on which conspicuous notice is given that such meat is sold, and further no sound or other class of meat may be sold in the same place where such unsound meat is sold. Severe penalties are provided for cases of infringement of these regulations.

Contrary to what might be expected, the average difference between the market price of sound, healthy meat, sold in the ordinary way, and of the inferior meat sold in the above licensed premises, known as Freibanks, does not vary so greatly. Thus, the average price for good Beef being 75·6 Pfennig per pound, that sold at the Freibank was only 58·3 Pfennig; for veal, 55·5 for good, as against 44·2 for the unsound; for Mutton, 58·8 as against 54·5, and for Pork, 61 as against 57·4 Pfennig. These relative differences are said to practically never vary.

in the case of a very few States has it been applied to meat for internal consumption.

In the Australasian Colonies, the question of the use of public abattoirs has been considered by the different Parliaments, but, so far as I am aware, it has only been adopted in New Zealand, and there only partially, under the Slaughtering and Inspection Act of 1900, under which it is provided that in every case where the population of any borough or district is not less than 2,000 persons, it shall be the duty of the Local Authority thereof to establish and register under the Act, and at all times thereafter to maintain an abattoir for the purpose of such borough or district, and that no licence shall be granted in respect of a private slaughterhouse in any district in which there is established an abattoir under the control of the Local Authority.

In other Australian Colonies, although public abattoirs have been established, I am not aware that slaughtering has been compulsorily confined to such abattoirs, although the effect of the public institution has been to abolish the private concern. In South Australia, Parliament refused to grant the application of the City of Adelaide for a monopoly in slaughtering.

It may not be without interest, in view of the desire of the Peninsula authorities to establish a general municipal abattoir, to cite the cost of some of the public abattoirs which have been erected elsewhere. Thus in England, in Birkenhead, the slaughterhouse erected in 1886 cost £14,000, that erected by the City of Manchester in 1872, £50,000, and that in Birmingham by the Corporation in 1897, £127,311. In Germany, the Berlin slaughterhouses, cattle and meat markets erected in 1883 cost over £600,000. Those of Cologne with a population of 350,000 cost £401,953, erected in 1892-5. In Hanover, having a population of 126,000, the slaughterhouses erected by the Butchers' Union cost £140,000, and in Leipsic, where the population is 330,000, the slaughterhouses cost £235,000.

Inspection of Meat and Food.

With the exception of some few of the larger towns, the inspection of meat and food is, for practical purposes, entirely neglected. As will be seen from a perusal of the annual reports attached to this volume, the statement generally made on this subject is that no such inspection is carried out by Local Authorities, nor is it considered necessary. Even where some sort of an inspection is attempted, it is rarely, if ever, carried out with system or by the aid of competent inspectors.

Unsound Meat.

With regard to the inspection of meat, this question has already been touched upon when dealing with Slaughterhouses. Although as I have said there is no doubt that in many places in the Colony diseased and unwholesome meat finds its way on to the market, with these exceptions, speaking generally, it is questionable whether diseased Colonial meat is sold to the public to the extent alleged by some to be the case. In the larger urban centres, especially those of the Peninsula, it is probable, if accounts are reliable, that much meat of an unfit kind is disposed of for human food, but in the absence of systematic inspection it is quite impossible to venture on any exact statement. Such meat is unfit

either by reason of it having undergone putrefactive changes, or from having been derived from diseased animals; in the latter case chiefly from tuberculous animals, mostly stall-fed cows; from measly pigs suffering from *Cysticercus Cellulosæ*; from animals that have died during or after parturition; from "fevered" animals and from those that are too immature or too aged. No doubt much of such diseased and unsound meat is salted or treated with antiseptics or finds its way into sausages, or is dressed so as to disguise as far as possible its diseased origin.

There are, of course, many other diseases prevalent among the stock of this Colony, but owing to the fact that they occur mainly among animals on the veld and to the rapid course of the disease, it is hardly to be expected that animals suffering from, or that have died from, them find their way to market. Of such diseases the Director of Agriculture, in his report for 1905, gives account of some 479 outbreaks brought to the notice of the Veterinary Department, and 1,012 animals that died or were destroyed, which is doubtless a very incomplete record. The bulk of these deaths were in consequence of Anthrax, Lung Sickness, Red-water and Spongieziekte. Occasionally outbreaks of Anthrax have occurred, chiefly among Natives eating Anthrax cattle, but of the other diseases mentioned there is no evidence as to their effect on human beings eating affected animals.

There is no doubt that of all diseases Tuberculosis and Measles are the most important. The former of these is, however, of far greater moment as affecting our dairies and milk supplies than in connection with the sale of meat.

Measly pork is exceedingly common in this Colony, and more especially in the Native districts. Natives suffer to a great extent from the tapeworm *Toenia Solium*. They relieve themselves on the veld and the pigs they keep act as scavengers, consuming in the process the eggs of the parasite voided by their owners, which after being swallowed develop and produce in them the condition of Measles. There is good reason to believe that the local markets of Queenstown, King William's Town and East London receive considerable supplies of such measly pork.

In August, 1905, I was approached by Dr. Porter, the Medical Officer of Health to the Johannesburg Municipality, with regard to twelve carcasses of fresh pork from Queenstown consigned to a firm in Johannesburg, which on arrival there were found by the Johannesburg authorities to be "literally riddled with Measles." These carcasses were accompanied by a certificate, dated three days previously, signed by a person styling himself "Veterinary Surgeon," and certifying that the writer had examined the carcasses of twelve pigs, the property of Mr. H. J. Klibbe of Imvani, Cape Colony, that they were perfectly sound, free from Measles and fit for human food. Subsequent enquiry elicited the fact that the gentleman who signed this certificate was not a qualified Veterinary Surgeon.

Naturally, the Health Authorities in the Transvaal strongly object to the sending of diseased meat into their district in this manner, and the Medical Officer for Johannesburg pertinently enquired of me, whether there is not any Veterinary Medical Association before which the person granting such a misleading certificate could be brought. Unfortunately, however, neither in this Colony, nor in South Africa, is it incumbent upon a person posing as a Veterinary Surgeon to be properly qualified in that branch of Medicine, nor are there any rules regulating the conduct of any person practising as a Veterinary Surgeon. In other

civilised countries this matter is regulated by Law, but in this Colony, where animal diseases are of such great economic importance to the welfare of the country, no such legislation exists.

Apart, however, from this consideration, if the public control of slaughterhouses is to be properly carried out by local authorities, it is essential that the matter shall be in the hands of expert Veterinary Officers, which can only be ensured by the introduction of legislation for regulating the proper conduct of the profession.

I may mention that, on the same day that these measly carcasses were received at Johannesburg, the same trader exposed on the King William's Town market 15 lbs. of sausages manufactured from measly pork, which were seized and condemned by the Municipal Authorities, and, as a result, Mr. Klibbe was prosecuted and fined £5, or imprisonment for 14 days.

It is not, however, on the market nor in the shop that the inspection of meat can be adequately carried out, for, in order to ascertain whether meat is diseased, or not, it is necessary to examine the carcass as a whole with the viscera *in situ*, for it is from these latter that indications of disease during life are usually to be found. In many cases disease may have been far advanced without the flesh, if it be carefully prepared by the butcher, showing noticeable signs of disease. And this is, of course, the difficulty that is encountered in dealing with imported meat. It is impossible merely from an inspection of the frozen carcass to be sure that it has not been derived from a diseased animal.

The general question of the control and the conveyance of unsound food from one Colony to another is one which requires the joint consideration of the different South African Governments. At the present time, whatever the powers affecting the matter that may be in force in any State, these have only local application and cannot apply beyond the borders of the State by which they have been enacted. It may be mentioned that this matter has also assumed prominence in places in this Colony, such as Mafeking, where the bulk of the meat supply comes from beyond the borders of the Colony.

It is not, however, merely a question of whether meat is sound or unsound which should be watched by the Local Authority, but also the manner in which all meat is prepared or kept for sale and is generally dealt with. The unsatisfactory manner in which meat is conveyed from one place to another, the generally ill-ventilated and insanitary premises on which it is stored and sold and the conditions under which meat is salted and sausages are often manufactured should be controlled by Local Authorities.

Unsound Food.

With regard to the inspection of other foods than meat, this is of most importance in the case of perishable articles which are liable either to contamination or to undergo putrefactive changes. Ample powers are furnished to Urban Local Authorities enabling them to frame regulations for this purpose, and a series of Standard Regulations on the subject have been drafted by the Department for adoption by Local Authorities. But in spite of these powers, many places are still allowed by Authorities to be used for the purpose of preparing and storing food for sale, which are quite unsuitable for the purpose. Much greater supervision is necessary by Local Authorities over such places, and especially over the manufacture of aerated waters and ice. I recollect in one of our

towns inspecting an aerated water factory, the water supply of which was derived from a shallow well in a back yard situated side by side with a cesspit in constant use. This manufacturer enjoyed a large custom. Regarding ordinary adulteration of food, this is dealt with by the Government under the provisions of "The Sale of Food and Drugs and Seeds Act, 1890," both by the continuous purchasing of samples throughout the Colony from wholesale and retail dealers, and by the examination of goods entering the Colony through the Customs.

The Control of Dairies and Milk Shops.

The important duty placed on the Local Authority of controlling dairies and milk shops is also greatly neglected. In up-country places this matter is not one of so much moment, as in such places the milk trade is small or hardly exists at all, but in the larger towns it deserves most serious attention. In Cape Town systematic efforts are made to keep the sale of milk under observation and control by means of regular inspection, but as most of the milk supplies come from outside dairies, the control is necessarily more or less ineffective. Many of these dairies are situated at Maitland and beyond, and I doubt whether the public are aware of their condition, or of the manner in which the milk is collected and dealt with. Such buildings as exist are frequently of the very worst type of construction, ill-ventilated, undrained and generally filthy. The milk is drawn by dirty hands from dirty udders into dirty utensils and is stored in most unsuitable places, sometimes in living and sleeping rooms. It is delivered to the consumer in ordinary wine bottles far from clean, plugged usually with a stopper of chewed paper. The premises have no proper water supply, and in the majority of cases it is obtained from a shallow well in the yard, into which a large part of the drainage from the byres and other places finds its way.

It may, perhaps, be thought that this is an exaggerated picture, and that, if true, it only applies to perhaps one or two dairies. But such is not the case; time after time medical officers of this Department have had occasion to inspect dairies in connection with outbreaks of disease, such as small-pox, typhoid fever, leprosy and syphilis affecting their employes. In numerous outbreaks of typhoid fever there have been grave reasons to suspect the dairy as having spread the disease, but, except in one or two cases, it has been difficult to definitely substantiate such suspicions.

In many respects the local authority could, under the powers it possesses, effect considerable improvement in this matter, more especially in the manner of the conveyance and delivery of milk and the abolition of the filthy wine-bottle system.

Tuberculosis in Dairy Cattle.

But probably more important than the state of the dairies is the condition of the cattle that yield the milk. I am informed by Mr. William Robertson, M.R.C.V.S., a veterinary surgeon and bacteriologist to the Agricultural Department, who has had a very extensive experience, that it may be safely said that there are but few dairies in the Peninsula—certainly none of any size—in which the cattle are not affected by tuberculosis, in many cases to a most serious extent. Mr. Robertson has kindly furnished me with the subjoined important memorandum on the subject. At the present

time only in one or two isolated cases has any attempt been made by dairy farmers to have their herds tested with tuberculin and to eliminate those animals found to re-act to the test, and I am informed that even in these cases the result has been so alarming, by reason of the number found to be affected, that such owners have hesitated to continue the process of elimination. When it is remembered that many cows are found giving good yields of milk at a time when they are extensively affected with the disease, and, moreover, that a very common seat of its occurrence is in the udder, the extreme danger that exists of the infection of milk supplies will be readily understood. The Bacteriological Assistant in charge of the Health Laboratory attached to this office rightly draws particular attention in his Annual Report, which will be found printed in Annexure "A" to this volume, to the question of infected milk supplies, and he comments on the fact that so few samples of milk are submitted to the Laboratory for bacteriological examination. During 1904, only one such sample was received, and in 1905, none. As the Bacteriologist remarks, "Numerous samples of milk are examined every year for the presence of added water, or to determine the amount of abstracted fat, but no notice seems to be taken of added filth, nor the presence of tubercle or other harmful organisms. A purveyor would appear to be free to supply the general public with milk teeming with disease-producing germs, and if it contain pus from a suppurating udder then it will only be considered rather richer than usual."

I cannot impress too forcibly on Local Authorities and the public the necessity for effecting the constant thorough inspection of dairies and milk supplies, and for insisting on the adoption by cow-keepers and milk vendors of proper measures of hygiene. Above all, steps should be taken for dealing with tuberculous cows, and here the Law requires some amendment in order to enable the application of the Tuberculin test to be carried out by Local Authorities.

In the meantime, I have only one piece of advice to give: no bought milk should be consumed by anyone until it has been thoroughly sterilised by heat.

In dealing with this matter of the increasing prevalence of Tuberculosis among cattle, I would direct attention to the rapid increase of the disease among the population of the Colony and the probability of the inter-action of the one upon the other in spreading the disease.

MEMORANDUM ON THE PREVALENCE OF TUBERCULOSIS AMONGST DAIRY STOCK IN THE PENINSULA.

By WM. ROBERTSON, M.R.C.V.S., Government Veterinary Surgeon
and Bacteriologist.

That the disease Tuberculosis has been on the increase during the past few years is not doubted by any Veterinarian dealing with the subject. To a certain extent the increased number of outbreaks may be due to increased knowledge of their whereabouts, but I think I am under the mark when stating that, taking dairy herds through the Peninsula, the percentage of those affected with the disease must be put at over sixty per cent. At present the legislation dealing with the inspection of the animals yielding the milk supply of Cape Town and neighbourhood is very defective, and may be taken as non-existent. At present it is immaterial what is the matter with a cow as long as her udder yields a fluid

which satisfies the public (and the Analyst as regards water adulteration), it is of no moment whether the secretion contains pus cells, tubercle bacilli, fat globules or a mixture of all these. For quite a time the officers of the Veterinary Service were under the impression that the native born and reared cattle had to a certain degree a natural resistance to the disease; this may be the case in veld animals, but in regard to stabled cows subsequent experiences have given these officers reason to change their minds. To quote from actual personal experiences, I saw a cow which was born in, and for eleven years lived at a stable attached to a house on the Camp Ground, Rondebosch (this stable was a model cow house and hygienic in every way). This animal, which until two months ago seemed in perfect health, began to show symptoms of Lung affection, and as treatment was of no avail it was killed, and post-mortem examination showed the most extensive pulmonary lesions of Miliary Tuberculosis I have ever seen. The mother of this animal and the calf were tested with Tuberculin, both reacted and on slaughter showed extensive and far-reaching lesions of Tuberculosis.

Several dairy-men have approached the Department to have their cattle tested. The results of testing the first batch have shown such a high percentage of positive reaction that many owners have declined to allow the Department to proceed further. This is in dairies supplying milk to Government Institutions, hospitals and private families.

The Law in regard to the stamping out of Tuberculosis is, as I said, futile; cattle for breeding purposes are tested on entering the country and after the second reaction slaughtered, the flesh generally being eaten by Christians (the Jewish slaughterer also acts as Meat Inspector for his co-religionists, and religiously rejects any flesh with the slightest taint of Tuberculosis about any part of the carcass,—rather a difference to the Christian who trusts the interested butcher to strip, clean and generally dress the diseased carcass into some semblance of decent meat). As regards the danger of this flesh being consumed by man and just how much or where Tubercular lesions should condemn a carcass is for the Medical Officer of Health to decide, but I should say that if we are to eat such meat and milk let it be labelled as such and then the purchasers will to some extent know what they are buying. In my opinion all dairy cattle should be tested at intervals with Tuberculin, the testing Veterinary Surgeon inserting in the ears of all those which pass the test a non-removable copyright metal button bearing a number and letter, and also branding all reactors to the test in some prominent place and way; these reactors to be slaughtered, or, if valuable breeding cattle, kept separate, calf removed to a foster-mother or hand-fed when born, and the milk sterilised and fed to pigs.

All cows giving milk for human consumption should be inspected by a qualified Veterinary Surgeon monthly, who shall sign a book as to general condition of cows, shed, and milkers. At present the Veterinary Department can do nothing unless the owner willingly allows it to test his herd; there is no compulsion in the matter. Beyond the serious consequences to the people from the consumption of Tubercular milk and meat, there is the grave menace to the cattle-breeding industry of the country, and the fear that as our pure-bred herds increase, so will the disease, until we may be in the condition of certain parts of Europe, where authorities have stated that not a single pure-bred herd was free from Tuberculosis. I think this is one of the most serious menaces to the health of the people, and something should surely be done to prevent the sale of milk from Tuberculous cows or the flesh from similarly infected animals.

These are facts which can easily be proved to any hygienist or legislator having the interest and energy to seek them.

Native Locations.

The proximity of large insanitary Native Locations is a very serious factor affecting the health and sanitation of many Colonial towns. Considerable improvement has taken place during past years in the control of locations by Municipalities, but in many places—indeed, in the majority of places—much improvement still remains to be accomplished. It appears to be a common idea, that by prohibiting the residence of Coloured persons within the town and banishing them to a Location, the health of the European community is thereby adequately protected, the fact being lost sight of that sickness and disease cannot exist in one community without more or less adversely affecting the inhabitants of

adjoining communities. Moreover, in many places practically all of the servants employed by the white community are drawn from the Location which thus comes into intimate contact with the Europeans.

It is, therefore, very necessary that every Local Authority should take steps to adequately control the health and sanitation of any locations under its jurisdiction; to insist upon the construction of healthy dwellings; that they shall not be overcrowded, and that they and their surroundings shall be kept in a cleanly condition. As a general rule, however, it may be said that Local Authorities do not insist on these requirements, and they rarely provide the inhabitants of their locations even with a proper and adequate water supply, or arrange for the proper disposal of nightsoil. In fact, in most locations latrines are entirely absent. It may be added that, in many places, the situation of the location is so badly chosen that any filth coming from it drains towards the town, and sometimes even into the water furrows running through the town. Thus, in the case of one recent inspection, it was found that the drinking water of the town is led by a furrow through the location to the village, by the time it reaches which the water has become indescribably polluted. The location is without closet accommodation, and the neighbourhood of the furrow is frequently selected by the inhabitants of the location for the depositing of nightsoil and other filth.

In most locations the rate of mortality among the inhabitants is excessive, and in some it is simply appalling. Such mortality, of course, connotes much sickness and consequent deterioration of the economic value of the inhabitants as labourers and servants.

Much good has been effected by the operations of The Native Reserve Locations Acts of 1902 and 1905, which, in the case of the Cape Peninsula and Port Elizabeth, have continued the policy inaugurated under the Plague Administration, by the maintenance of the large, properly supervised, Government Locations at Ndabeni in the Peninsula, and at New Brighton at Port Elizabeth. From a health point of view, it would be well if the operations of the Acts could be extended to other large urban centres of population.

In Annexure "F" will be found printed the Annual Reports of the Medical Officers of these two Locations. At the commencement the Medical Officer of Health for the Colony was made responsible for the supervision of the health and sanitation of these Locations, but on the 1st July, 1905, owing to the fact that the staff of this office had been considerably reduced, it was found no longer possible to exercise active or responsible supervision over these matters, and, accordingly, at my request, the Native Affairs Department assumed control over this section of the work. The Resident Medical Officers are, however, expected to continue at all times in touch with the Medical Officer of Health for the Colony, and accordingly they report to him at regular intervals on the health and sanitation of the Locations under their medical charge, and also this office, by means of advice and inspections, continues to assist the Native Affairs Department in its administration.

The populations of these Locations have fluctuated considerably of recent years. In 1904 the daily average population of the Ndabeni Location amounted to 4,021, but in 1905 the number had fallen to 2,890. The decline in this Location is without doubt due to the universal depression which has diminished the demand for labour, but it is also possible that some part

of it may have been caused by the circumstance that Natives are gradually drifting back to the areas from which they were removed by the Plague Administration in 1901. The Annual Death Rate in this Location was 21.11 per thousand in 1904, and 16.61 in 1905.

In the New Brighton Location, during 1904, the average population was 2,028. This was increased in 1905 to a daily average of 3,662, owing to the measures taken by the Plague Administration to deal with the wretchedly insanitary communities which had sprung up at Dassies' Kraal and Korsten, and to the more rigorous enforcement of the Native Reserves Locations Acts. The Annual Death Rate in this Location was, in 1904, 23.7 per thousand, and, in 1905, 28.1 per thousand of inhabitants.

All of these rates of mortality compare very favourably with those taking place in ordinary Municipal Locations throughout the Colony, but, nevertheless, when the fact is remembered that a very large proportion of the population of both these Locations, and especially of the Ndabeni, consists of young adult males, the rates of mortality cannot be considered satisfactory. As is, unfortunately, the case elsewhere among the Native and Coloured populations, much of this mortality is due to the ravages of Tuberculosis. In the Ndabeni Location, the mortality from this cause was, in 1904, 5.22 per thousand, and in 1905, 6.23 per thousand. While in the New Brighton Location it was, in 1904, 5.92 per thousand, and in 1905, as high as 8.74 per thousand.

As indicating the nature of sex and age composition of the population of these Locations, it may be stated that in the Ndabeni Location the Annual Birth Rate was, in 1904, only 21.88, and in 1905, 25.6 per thousand of the population; while in the New Brighton Location it was, in 1904, 33.5 per thousand, and in 1905, 34.7 per thousand of their respective populations. These figures are considerably below the birth rates taking place in other locations and are, of course, due to the small number of females in their populations.

Cemeteries and Burial Grounds.

Contrary to the tendency of urban communities to banish from their midst slaughter-houses and locations, in the case of cemeteries the desire is generally displayed of having them in the very heart of the community, and the gradual closing of such insanitary burial-grounds and the establishment of proper public cemeteries at a suitable distance beyond the confines of towns constitute one of the most difficult problems with which Government has to deal, for it nearly always has to be undertaken in the face of very strong personal, religious, and often public opposition. As an example, I may cite the case of a town in the Western Province, having a population of over 11,000, where there exist no less than thirteen cemeteries scattered through the town, all of which have been on several occasions adversely reported upon after careful inspection made by Medical Officers of this Department. Yet nothing but opposition has been received by the Government from the Local Authorities in bringing about the closure of these unhealthy cemeteries and in the establishment of a suitable public cemetery on Crown Land beyond the borders of the Municipality and within a distance of a couple of miles of its centre.

In the case of another Municipality of over 10,000 inhabitants in the Western Province the same difficulty is being experienced by the Government; the cemeteries are scattered about, many

of them being unenclosed, and some of them being entirely unauthorised and under no control whatever. In the case of portions of the Cape Peninsula, this trouble is an ever present one.

In the establishment of public cemeteries and burial-grounds, the fact seems to be universally lost sight of that, once established, they are bound to remain for a very long time to come, usually for a period covering several generations of inhabitants, owing to the fact that, as soon as burials have taken place, vested interests are created and sentiments are raised which preclude the burial-ground being closed except for most urgent public reasons. Moreover, once a burial-ground, it is exceedingly difficult to put the site to any other use. In proof of this I need only allude to the abandoned cemeteries on the Somerset Road, which will require a special Act of Parliament before they can be dealt with. Therefore, in the choice of a burial site, it is necessary to select one which is not likely to become in the near future surrounded by habitations, yet this necessity is one which it is most difficult to bring home to the public.

It is to be hoped that eventually every Municipality will establish, under the ample provisions of "The Cemeteries Act, 1883," Public Cemeteries, in which, in accordance with the provisions of the Act, portions are reserved for each religious denomination, and that, following on this, the many unhealthy and ill-situated burial-grounds now existing will be abolished.

Sanitary Powers of Rural Authorities.

One of the most urgent questions connected with the public health of the Colony is that of the necessity for endowing Rural Local Authorities with simple but sufficient powers for dealing with elementary matters of sanitation in the areas under their jurisdiction, and more especially such areas as are in process of becoming urbanised but are not yet sufficiently populous to warrant the placing of them under a form of Urban Authority, such as Municipality, for the management of their affairs.

Under the existing Public Health Acts, the Rural Local Authority, which is the Divisional Council, has no specific powers afforded it in respect of sanitation and public health other than those relating to the mere dealing with actual outbreaks of certain infectious diseases. But such Authorities are frequently faced with the necessity for dealing with such questions, yet, in the absence of proper powers, they can do little or nothing, with the result that in many cases a most unsatisfactory and often dangerous state of things has arisen. This difficulty occurs more particularly in respect of those populous communities which have in recent years grown up just beyond the boundaries of Municipal areas and which are without means of sanitary control of any kind. Instances of such areas will be found in the case of West London, lying just beyond the borders of the Municipalities of Rondebosch and Claremont, also in the District known as Retreat, just beyond the limits of the Wynberg Municipality, and in the case of Korsten and Dassie's Kraal, which have arisen just outside the Port Elizabeth Municipality. In these areas a state of things has come about which, under proper sanitary laws, should never have been possible. The ground having been mostly sold in very small allotments to comparatively poor persons, the majority of whom are Coloured or Native, the owners have erected unhealthy dwellings of the worst construction, and so situated as re-

gards absence of roads and means of access for sanitary purposes as to render the areas impossible of future sanitary administration without the outlay of considerable sums of public money in the making of improvements. Such communities are entirely without proper water supplies and adopt no means whatever of dealing with the removal and disposal of night-soil and refuse. They have thus been the occasion of serious outbreaks of disease which, as in the case of Small-pox, has not been confined to the members of the communities themselves, but has by them been spread to surrounding Districts.

Naturally, Municipalities upon whose borders this state of things has arisen by no fault of their own, are averse to extending their boundaries so as to include these areas and thus bring them under proper Municipal Administration, for to do so would entail, as I have said, a considerable outlay, the bulk of which would fall upon the ordinary revenue of the Municipality, owing to the fact that, in most cases, the rateable value of such areas is very small and consequently the rates to be levied therefrom practically inconsiderable. On the other hand, but little good can be expected by the establishment over any such area of an independent Local Authority in the shape of a Village Board, or other Body, inasmuch as suitable persons to serve on such a Local Authority are rarely obtainable, and moreover, the revenue which could be raised by it would be quite insufficient to enable it to undertake a proper sanitary administration.

The point, however, which I wish to emphasize in regard to such areas is that they want sanitary control at the beginning, in the early stages of their growth, so that the evolution of conditions which will hamper the future sanitation and well-being of the community may be prevented; but, such control, to be effective, must be exercised at a time long before the community is of sufficient growth to render any separate autonomy possible; and it therefore follows that such control can only be obtained through the Rural Authority within whose limits the area lies. There is, also, another consideration that the establishment of numerous small and incapable Local Authorities is to be discouraged, as such Bodies are comparatively costly and are more frequently a drag upon improvement than otherwise.

Years ago, in the original Public Health Amendment Bill laid before Parliament, such powers for Rural Authorities were provided, but, unfortunately, mainly owing to the opposition of Rural interests, they were cut out of the Bill by Parliament. Provision has, however, been again made for them in the recently published Public Health Bill, to which in this Report I have so frequently alluded. The proposed "Rural Councils Bill" also deals with the same subject. In the meantime, considerable assistance has been rendered to Divisional Councils by the recent judgment of the Supreme Court, in the case of *Rex versus Findlay*, delivered on the 21st August, 1905, which laid down that Divisional Councils are Local Authorities for the purposes of Sections 50 and 51 of "The Public Health Amendment Act, 1897," the words "Local Authority" in these Sections having hitherto been interpreted to mean only *Urban* Local Authorities. By this ruling a Divisional Council is enabled to issue orders and to apply to the Court in respect of "nuisances" arising within its District, including the pollution of drinking water, the use of houses unfit for human habitation, and the overcrowding of dwellings and the slaughtering of cattle. It is with diffidence that I must, personally, confess to some doubt as to the soundness of this ruling, but

so long as it stands it must, in the absence of properly defined statutory powers, prove of immense advantage in the control of public health to Divisional Councils generally.

4. THE REPRESSION OF PREVENTABLE DISEASE.

Small-pox.

As in previous years the prevention of Small-pox required constant vigilance.

At the beginning of 1904 outbreaks of Small-pox were still in progress in the following districts of the Colony Proper:—Willowmore, Cape, Paarl, Colesberg, Malmesbury, Carnarvon, and in the mainly Native District of Glen Grey. During the year, however, considerable dissemination of the disease took place and outbreaks occurred in the Districts of Venterstad, Lady Grey Cape, Carnarvon, Cathcart, Colesberg, East London, Glen Grey, Gordonia, Herschel, King William's Town, Keiskama Hoek, Malmesbury, Namaqualand, Oudtshoorn, Paarl, Wellington, Port Nolloth, Prieska, Queenstown, Robertson, Simon's Town, Stellenbosch, Steytlerville, Stutterheim, Willowmore, Woodstock, Durbanville, Worcester, and Wynberg. The dissemination of the disease in the Western Province was in a large measure due to the lax way in which the Paarl Municipality dealt with an outbreak within its area which commenced in June, 1904, and from which a considerable number of cases were exported to other Districts in the Colony. The latter part of this year was marked, generally speaking, by a gradual subsidence of the disease, and towards its end there remained comparatively little Small-pox in the country.

At the beginning of 1905 Small-pox appeared in the following Districts:—Aliwal North, Cape, Malmesbury, Paarl, and Glen Grey. During the year infection was spread broadcast and the following Districts became attacked, namely:—Albany, Aliwal North, Barkly East, Barkly West, Klipdam, Beaufort West, De Aar, Cape, Carnarvon, Cathcart, East London, Fraserburg, Graaff-Reinet, Glen Grey, Hay, Herbert, Herschel, Kimberley, King William's Town, Laingsburg, Malmesbury, Middelburg, Molteno, Murraysburg, Namaqualand, Paarl, Wellington, Porterville, Prieska, Queenstown, Whittlesea, Sterkstroom, Simon's Town, Pearston, Stellenbosch, Somerset West, Vosburg, Indwe, Woodstock, Durbanville, and Wynberg. The latter part of this year was also generally marked by a gradual subsidence of the disease, a notable exception, however, being the Cape Division, where an extensive outbreak occurred, chiefly in Cape Town during the last two quarters of the year, extending into the present year.

The total number of outbreaks during 1904 was 78, involving 30 Districts and Sub-Districts. The total number of cases discovered was 365, of which 93 had previously been vaccinated, and 272 were unvaccinated. The total number of deaths which occurred was only 5, yielding a case mortality of 1·37 per cent. Three deaths were in unvaccinated persons, giving a mortality for this class of 1·10 per cent., while in the pre-vaccinated cases the mortality was 2·15 per cent.

During 1905 as many as 111 separate outbreaks occurred, involving 41 different Districts and Sub-Districts, with 832 cases of which 32 died, yielding a case mortality of 3·85 per cent. Of the cases, 264 had been pre-vaccinated, and 568 were unvaccinated. Of the vaccinated cases 8 died or a case mortality of 3·03 per cent., while

of the unvaccinated cases 24 died, giving a case mortality of 4·23 per cent. At the end of the year outbreaks were still in progress in the Districts of Cape, Wodehouse, Queenstown, Glen Grey, East London, Hay, Stellenbosch, King William's Town and Beaufort West.

The expenditure incurred directly by the Government during 1904 in connection with the suppression of Small-pox, as taken from returns rendered by the different Resident Magistrates, amounted to £2,066 2s., most of which was on vaccination, and that incurred by the Local Authorities in dealing with cases of Small-pox, but on which, however, the Government will be required to refund four-fifths, amounted to £6,093 11s. 3d., making a total for the year of £8,159 13s. 3d. In 1905 the expenditure incurred directly by the Government amounted to £2,166 19s. 4d., while that incurred by the Local Authority was approximately £6,547 3s. 8d., making a total expenditure for the year in the Colony Proper of £8,714 3s.

In the Native Territories.

In the Native Territories during 1904 Small-pox was notified in 11 Districts, but in every instance the disease was arrested before it had attained any serious proportions. In all 53 separate outbreaks occurred, with 190 cases, all being in Natives, with 7 deaths, yielding a case mortality of 3·68 per cent. Only 35 of the cases had been pre-vaccinated, the remaining 155 being returned as un-vaccinated. All the 7 deaths occurred in the un-vaccinated cases and the mortality in these, therefore, amounted to 4·52 per cent. as against none in the vaccinated cases. The expenditure incurred in dealing with these cases is estimated to have been approximately £954 15s. 4d.

During 1905 13 different Districts in the Native Territories became infected, in which Districts there were in all 30 separate outbreaks. The cases numbered 126, all in Natives, of which 2 only died, yielding a case mortality of 1·59 per cent. Only 15 of the cases had been pre-vaccinated, none of whom died. In the remaining 111 unvaccinated cases the mortality was, therefore, 1·8 per cent. The expenditure involved in dealing with these outbreaks amounted to £702 10s. 9d.

During the two years under review the question of dispensing with native guards in connection with cases of Small-pox has been under consideration, for it has been for a long time felt that unless really responsible persons could be procured for the purpose, expenditure on guards was not commensurate with the results obtained, owing to the unsatisfactory manner in which they have usually carried out their duties. It has been decided, therefore, to dispense with their services as far as possible in the future, and the procedure now adopted consists in making the Headmen of the various locations responsible for the due observance of quarantine.

On the whole, this plan is working satisfactorily.

The following brief particulars of interest may be given in regard to some of the more important outbreaks.

In the Cape Peninsula.

Throughout the year 1903 sporadic cases of the disease continued to crop up in Cape Town and various parts of the District, but in no instance did the disease spread to any extent. Also, during 1904 only a few scattered cases occurred, numbering in all

20, of which 5 were European and 15 Coloured. Six of these were discovered within the Cape Town Municipality, 10 in the area controlled by the Cape Divisional Council, 1 in the Woodstock Municipality, 2 amongst convicts in the Breakwater Convict Station, and 1 on board the S.S. "Braemar Castle" in Table Bay. No deaths took place.

In the first part of 1905 only sporadic cases of Small-pox occurred within the Division, but towards the middle of the year the disease began to advance in the Division, and by the end of the year as many as 58 cases had occurred, of which number 19 were European and 39 Coloured persons. Of these cases 22 were discovered in the Cape Town Municipality, 17 in the area controlled by the Cape Divisional Council, 3 in Claremont, 2 in Wynberg, 2 in Kalk Bay, 3 in Woodstock, 7 on the Eastern Telegraph Co.'s Cables ship "Britannia" in Table Bay, and 2 on H.M.T. "Dilwara" also in Table Bay. During the year one Coloured male died of the disease. Towards the end of 1905 there was not the usual subsidence of the disease which may generally be expected in accordance with the seasonal variation of its epidemicity in this country, and during the first four months of the present year, 1906, there have occurred 109 further cases, of which 88 were discovered in Cape Town, 13 in Woodstock, 3 in Maitland, 2 in Claremont, 2 in Wynberg, and 1 in Sea Point. Of these 109 cases 13 were European and 96 were Coloured. There were 4 deaths during this period from the disease all in Coloured infants.

Many of the Cape Town cases, both in 1905 and during the first four months of 1906 were only discovered when in a state of convalescence, and there can be but little doubt that a number of cases escaped discovery altogether. A peculiar feature of this outbreak was the small proportion of cases notified by medical men, the discovery of the bulk of the cases being due to the energy of the Medical Officer of Health for the City and his staff. It would appear that a certain section of the Coloured community take every possible precaution to conceal cases of the disease, owing to the fear of removal of such cases to Rentszkie's Farm Hospital for treatment.

In the Paarl.

Two sporadic cases of the disease occurred during January, 1904, in the Paarl Municipality, which were removed to the Municipal Small-pox Lazaretto. After this date the Town appears to have been free from the disease until June following, when a case was discovered in the Jubilee Area, and as the result of the Municipality taking no action in the matter, other cases followed. One of these was discovered by the District Surgeon in Oude Tuin. He reported the matter in due course to the Council, who instructed their Health Officer to deal with the case, but the latter, it is stated, being unable to read the District Surgeon's handwriting reported to that effect to the Council. The Municipal authorities then allowed the matter drop, and the District Surgeon himself took no further action as he naturally assumed that the Municipal authorities had taken the case in hand. On the 2nd September a case of Small-pox was discovered at Salt River, Woodstock, and on enquiries being made from this Office the source of infection was traced to the Paarl. The matter was then investigated by an Officer of this Department, who found that the case which had been discovered at Salt River was directly infected by the case in

Oude Tuin above mentioned which had not been dealt with by the Paarl Municipal authorities. Moreover, on searching the area where this case had become infected, 24 other cases were discovered, which it was then found had been already notified to the Local Authority by the medical men practising in the Town, but no steps had been taken to properly isolate the patients and protect the immediate contacts by vaccination. Urgent representations were then made to the Local Authority that they should take proper means to effectively control the outbreak, but for a time these representations entirely failed in their object as the Local Authority decided that the disease was not true Small-pox. Meanwhile, the infection had been spread to Wellington, to the surrounding District of Paarl, and to other areas. Further strenuous efforts were made to induce the Local Authority to properly carry out the duties laid upon them by the Health Acts, but the efforts of the Department still only met with partial success. However, the Government despatched a Medical Officer to aid the District Surgeon to carry out the thorough vaccination of the Town and District, and when this had been completed the epidemic, which for a time was a source of danger to the whole Colony, was got under control. The outbreak was not thoroughly stamped out until the 18th May, 1905, in the Town, and the 18th September of the same year in the District. In all 112 cases occurred in the Town and District, of which 11 were Europeans and 101 Coloured, and 97 unvaccinated, and 15 pre-vaccinated. During the course of the outbreak 4,500 vaccinations were performed, mostly during the early months of 1905, by the Government Medical Officer above mentioned. The manner in which the Local Authority dealt with this outbreak is, I consider, an ample justification if any were needed for providing the Central Government with proper machinery for promptly coping with an outbreak of infectious disease in connection with which a Local Authority is neglecting proper means to effectually prevent its spread.

In Beaufort West.

A case of Small-pox was discovered in this Town on the 11th May, 1905, the source of infection of which could not be traced. Owing to the law regarding vaccination having been treated in this Town as a dead letter for many years past, an extensive epidemic of Small-pox might reasonably have been expected. Although, fortunately, this did not occur, cases of Small-pox were continually being discovered throughout the area, and as a result, in January, 1906, an inspection was undertaken by a Medical Officer of this Department. He reported that during 1905 only 501 persons had been vaccinated, in spite of the prevalence of Small-pox, and that in nearly all of these, the operation had been carried out because the persons operated on were immediate contacts of cases of Small-pox. In 1904 only 15 persons had been vaccinated, and in 1903 only 47. Thus, in a period of three years, only 563 persons, mostly adults, had been protected from Small-pox by vaccination, while during the same period some 650 births had been registered.

As a result of this inspection the Council passed a resolution deciding to exercise the powers conferred upon it under Section 47 of Act 4 of 1883, by which a local authority, can, when Small-pox is prevalent, require all persons to give proof of having been

successfully vaccinated, and failing such proof, to forthwith undergo the operation.

After this, within a few weeks, 3,334 persons were vaccinated, and 634 persons gave proof of having been already successfully vaccinated, and the epidemic thereupon quickly came to an end, the last case being discharged from Hospital on the 20th February, 1906.

In all, 39 cases occurred during this outbreak, 3 of whom were Europeans and 36 Coloured ; one of the Coloured cases died.

The following Table shows the effects of vaccination on the type of the disease during the outbreak :—

State as to Vaccination.	Class of Case.			Total Cases.	Deaths.	Case Mortality.
	Severe.	Moderate	Mild.			
Unvaccinated ...	16	5	10	31	1	3·23
Vaccinated, but not until within 12 days of onset of disease ...	...	...	6	6	None.	...
Vaccinated prior to 12 days before onset of disease ...	...	...	2	2	None.	...
Total ...	16	5	18	39	1	2·56

In Kimberley.

Early in May, 1905, a number of cases of Small-pox were discovered in the Greenpoint Location, Beaconsfield. On enquiry it was discovered that cases had existed in this locality from the beginning of the preceding month, but the means by which the infection had first been introduced into the area could not be ascertained. The Medical Officer to the Board of Health, after an examination of the cases, came to the conclusion that the disease was not true Small-pox, and, at a meeting of the Board held on the 15th of May, it was resolved to invite all the Medical practitioners in Kimberley to examine the cases and furnish the Board with their respective opinions. Their Reports were received and considered at a meeting of the Board, held on the 19th idem. Nine practitioners reported that they considered the disease to be Small-pox, and three supported the view held by the Medical Officer to the Board.

Meanwhile the disease was spreading rapidly and, in consequence of the difference of opinion regarding its nature, the Assistant Medical Officer of Health for the Colony was instructed to proceed to Kimberley and examine the cases then in the Lazaretto. After a careful investigation, he reported that the disease was undoubtedly Small-pox.

The first batch of 21 patients and 12 contacts was removed to the Lazaretto on the 10th of May, and by the end of that month there were 81 cases and 26 contacts isolated there. The contacts were chiefly the mothers of young children who were suffering

from the disease, or were infants in arms accompanying their sick mothers. Nine other cases occurred during this time amongst Europeans, who were treated in their own homes.

Very few of the inhabitants, especially the younger generation, were at this time protected by vaccination, and in consequence the disease spread rapidly. In all a total of 252 cases occurred, including 22 European Males, 11 European Females, 139 Coloured Males, and 80 Coloured Females. All the European cases survived, but there were seven deaths in Coloured persons, giving a case mortality for this class of patient of 3·20 per cent., or for all races of 2·78 per cent. 158 of the cases were unprotected by vaccination, 95 being unvaccinated and 63 being vaccinated only whilst incubating the disease, i.e. within twelve days of the date of onset; 61 of the cases were theoretically fully protected by vaccination, and in the remaining 33 the protection was waning as they had been vaccinated over 7 years prior to the date of exposure to the disease. Of the unvaccinated cases six died, giving a case mortality of 6·32 per cent.; those who had been vaccinated within twelve days of the date of onset, only one died, giving a case mortality of 1·59 per cent.; but of those who were fully protected by vaccination, or in whom the protection was waning, none died. The last case was discharged on the 28th November, 1905. In all 214 patients and 87 contacts were isolated at the Lazaretto, 11 became ill in the outside District and were quarantined there, and the remainder were treated in their own homes.

During the course of the epidemic, considerable difficulty was experienced in getting people to come forward freely for vaccination, and indeed, an Anti-Vaccination League was formed by a small section of the community. Accordingly at the request of the Board of Health, the Government published a Regulation on the 31st July, 1905, framed under Section 15 of Act 23 of 1897; by which the Board could require any person within its area to give satisfactory proof of having been successfully vaccinated within the preceding seven years. This regulation had been promulgated with marked success in some other parts of the Colony. Although the Board was not compelled to enforce rigorously its provisions, the increased powers conferred had an immediate effect, for, after its promulgation, the inhabitants came forward freely for vaccination. During the outbreak, according to reports, the District Surgeon vaccinated 12,546 persons, the Officers of the Board, 5,623, private medical practitioners in the Town about 3,000, and the Officers of the De Beers Company about 18,000 of their employees in the Compounds, making a total of approximately 39,169 vaccinations or re-vaccinations in the Division of Kimberley during the year. Most of these vaccinations were carried out in the months of August, September, and October, and, as a consequence, by the end of the latter month Small-pox was, practically speaking, stamped out.

The following Table shews the effect of vaccination on the cases; unfortunately statistics are not available to shew in what way vaccination influenced the incidence of the disease during the outbreak:—

Degree of Protection	State as to Vaccination.	No. of Cases.	Deaths.	Case Mortality.
Unprotected from Invasion.	Unvaccinated.	95	6	6·32
	Vaccinated, but within 12 days of onset.	63	1	1·59
Theoretically fully protected.	Vaccinated prior to 12 days from onset, but within seven years.	61	None.	...
Protection theoretically waning.	Vaccinated over seven years ago.	33	None.	...
All Cases.		252	7	2·78

The cost of dealing with this outbreak, exclusive of the amount expended on vaccination, amounted to £1,166 0s. 10d., four-fifths of which has been borne by the Government.

In East London.

In the middle of June, 1904, an outbreak of Small-pox commenced in the East London Municipality, which was suspected of being introduced by rail from Frankfort, in the King William's Town District, and accordingly the Government was charged with the cost of refunding, under Section 38 of Act 23 of 1897, all the expenditure on the outbreak spent by the local authority. The patients were removed to the Small-pox Lazaretto. The total number of cases discovered was 16 and one suspected case. Fifteen were treated in the Lazaretto, and the others were quarantined in their own homes. Steps were taken to have the town thoroughly vaccinated, and by October the outbreak was thoroughly stamped out, the last case being discharged from hospital on the 19th October, 1904. The total cost of this outbreak as rendered to the Government for refund under Section 38 of Act 23 of 1897 was £756 2s. 1d. Towards the end of 1905 another outbreak of two cases occurred which were treated by the Government on behalf of the Council in the Lazaretto, which during this year had been purchased by the Government from the Municipality for the sum of £1,000 for use as a plague hospital. The cost of the second outbreak was £32 14s. 1d.

In the Herschel District.

An outbreak of Small-pox, believed to have been imported from Basutoland, commenced in this District on the 3rd May, 1905, which proved to be rather an extensive one, infecting in all nine different Locations, and not being entirely stamped out until the

18th November following. During this period 159 cases occurred, all in Natives. Only one case was pre-vaccinated, which is a noteworthy circumstance, as a large proportion of the entire population of the district consisted of vaccinated persons, thus demonstrating the protective effect of vaccination. There were thirteen deaths, all in the unvaccinated persons, the total death rate being, therefore, 8.18 per cent. Steps were early taken to secure the thorough vaccination of the District, and the back of the epidemic was quickly broken. The number of contacts alone vaccinated during the course of this outbreak was 3,450.

In the Glen Grey District.

During the years 1904 and 1905 a considerable number of cases of Small-pox occurred, but the exact number is unfortunately not known, as the District Surgeon has failed to supply the information. For some years considerable difficulty has been experienced in dealing with outbreaks of Infectious Disease in this District, as the Glen Grey District Council was until recently regarded as the "Local Authority" under the Public Health Acts charged with the duty of dealing with this matter. This Council is composed entirely of Natives, with the exception of the *ex officio* Chairman, who is the Resident Magistrate of the District. The District Surgeon having been appointed Medical Officer to the Council repudiated any responsibility to or control by the Government in dealing with outbreaks of Small-pox and infectious diseases, contending that in connection with these diseases he was solely an officer amenable to the District Council. In view of the constituents of the Council the state of things thus created was seriously hampering the central administration in dealing effectively and economically with the outbreaks then in progress in this District, until at last the whole question had to be specially considered by the Government. As a result of the special attention thus given to the status of the Council and the officials it was discovered that the Council had not been legally constituted a "Local Authority" within the meaning of the Health Acts. The effect of this discovery was to vest in the Resident Magistrate the powers of a Local Authority under the Health Act, and as a result of this new arrangement the Administration has been enabled to deal much more effectively and economically with outbreaks of Small-pox and infectious disease. The Glen Grey District Council accepted this new arrangement very willingly and, with a commendable spirit of co-operation, decided by resolution to continue their financial responsibility for dealing with disease by contributing one-fifth of all expenditure incurred by the Government in the suppression of any of the diseases mentioned in or proclaimed under Section 38 of Act 23 of 1897, and to bear the whole of any expenditure incurred in connection with those diseases mentioned in or proclaimed under Section 27 of Act 23 of 1897, towards the cost of which the Government does not contribute in districts where Local Authorities under the Health Acts exist.

On the Recognition of Small-pox in the Colony.

One of the greatest difficulties which the central administration has to contend with in the matter of Small-pox prevention is that of ensuring the recognition of the disease by Local Authorities and, indeed, in many cases by medical practitioners. The question of

the identity of the disease prevailing in this Colony with Small-pox has been the subject of discussion for so many years past and the Government has been at so much trouble by its medical officers to elucidate the matter and to render assistance in the diagnosis of outbreaks, that it would hardly seem possible that any real doubt could still continue. But, nevertheless, the experience of the past two years has gone to show that almost as much scepticism as to the disease being Small-pox is often manifested at the present time as was the case years ago.

The great theory which has taken possession of the public mind and which is supported by the opinion of many medical practitioners in the Colony, is that there exists a third disease which is neither Small-pox nor Chicken-pox, but is in character somewhere intermediate between the two. This theory is mainly based upon the facts that the disease, as generally prevailing in South Africa, is of exceptional mildness, that on recovery "pitting" is often inconsiderable, and, that, as is usually but erroneously believed, vaccination affords no protection against its attack.

This new disease is supposed to have been derived from the Native races, and it is generally identified by the Kafir name of "Amaas,"* which signifies "Milk Pox" and which sufficiently indicates its supposed intermediate position between Chicken-pox, which in popular English is often known as "Glass-pox," from the clear fluid which the vesicles contain, and Small-pox, in which the vesicles become pustular and filled with thick matter.

To the superficial observer and to the person who is prone to generalise from a single experience, there are doubtless a number of points lending colour to this view. But speaking from a now long experience of this disease, and as a result of the investigation of many outbreaks and the observation of many individual cases of it, I can unhesitatingly say that it has never yet been my fortune to come across any case of this so-called distinct disease. In every instance which has come to my notice individual cases have either been true Small-pox or else Small-pox which has been modified in its effects by vaccination, while in every outbreak of it there have been found on investigation indisputable reasons for considering the disease Small-pox. Of course I am not mentioning disputed cases where the complaint has been some other well-known disease, such as Chicken-pox or Syphilis,† which has escaped diagnosis. Years ago, in 1896, the Government tried officially to meet the difficulty caused by such diagnoses by proclaiming Amaas to be a disease falling under the old Public Health Act, No. 4 of 1883, and, more recently, in the Public Health Amendment Act of 1897, among the notifiable diseases with which that Act concerns itself, has been defined, under Section 27, "*Small-pox and diseases resembling Small-pox*," and on this the Department has laid down by Circular instructions the rule that Amaas, is to be considered for all purposes a disease resembling Small-pox and to be treated as that disease.

As indicating the extent to which this theory of the disease prevails, it is sufficient to draw attention to the numerous

* "Amaas" is the name given by the Native to sour or fermented milk which is extensively used as a beverage.

† Apart from the mistake of diagnosing isolated cases of Syphilis as Small-pox, we have had whole epidemics of Small-pox diagnosed as Syphilis. For example, in 1903, on a case of Small-pox being imported into Concordia, Namaqualand, from Port Nolloth, enquiry elicited the fact that a severe outbreak was occurring at Port Nolloth which the then District Surgeon diagnosed as Syphilis, and it was found that there were some 72 cases of the disease in various stages. A number of these cases after recovery were vaccinated, but none developed successful vaccine vesicles.

reports on the subject, which have been made by officers of this Department throughout a number of years, chief among which is the exhaustive report dated the 19th March, 1896, made to Parliament by Dr. George Turner, when Medical Officer of Health for this Colony, as the result of an investigation into an outbreak of the disease which occurred at Graaff-Reinet. This report has since become almost a classic among South African medical writings, and it should in itself have long ago served to settle the question once and for all, but, on the contrary, the theory appears to be as vigorous as ever. In 1902 a very widespread epidemic of small-pox occurred in the Eastern districts of the Colony, beginning in the Bedford district, which was allowed to spread almost unchecked, solely for the reason that a number of medical practitioners and, following their lead, of local authorities and the public, refused to recognise the disease as being small-pox. It was not until many districts had become affected and the epidemic had assumed most serious proportions, and the Assistant Medical Officer of Health for the Colony, Dr. Mitchell, had had to perform a tour of enquiry and virtually of proselytism through the infected area, that local authorities consented to deal with the disease drastically as small-pox, which, as soon as this was done, speedily cut short the further progress of the epidemic; but this was not accomplished until serious expenditure had been incurred and important places, like Port Elizabeth, had been involved in the infection.*

In face of such repeated lessons, it is surprising that, in nearly every case where a severe outbreak has occurred, during the two years, 1904 and 1905, covered by the present report, doubt has, at any rate in the first instance, arisen as to the disease being true small-pox.

Thus, during the Paarl outbreak, to which reference has been made elsewhere, the laxness of the authority in dealing promptly with the disease was due in large measure to the fact that several of the medical practitioners of the town had expressed the opinion that the disease was not small-pox, and the public were only too ready to accept this decision, which relieved them from responsibility and from the personal inconvenience entailed in carrying out suppressionary measures.

Also, as has already been stated, in the case of the great outbreak that occurred in Kimberley last year, the same difference of opinion was expressed, and to settle it the local authority obtained the views of all the local Medical Practitioners, of whom nine expressed their opinion that the disease was true Small-pox, while four held the view that it was not. Nevertheless, the matter was only set at rest in the public mind by an exhaustive investigation being carried out on the spot by the Assistant Medical Officer of Health for the Colony.

Also, in the case of Beaufort West, the outbreak was similarly being neglected as not being Small-pox, until Dr. Thornton, an Additional Medical Officer of the Department, visited the town and demonstrated its nature.

*The original outbreak was in the Mancazana area of the Bedford District. The disease rapidly spread throughout this district, thence along the King William's Town-Cookhouse line, then in course of construction, to Cookhouse and Somerset East, and along the main railway line to Cradock, Naauwpoort, De Aar and Beaufort West; later on to Port Elizabeth, Bathurst, Fort Beaufort, Humansdorp, King William's Town, Victoria East and Willowmore Districts. In Bedford the disease was at first regarded as "water-pox" or "Kafir-pox," at Somerset East as chicken-pox, and at Cradock as "amaas." At the latter place a day or two before Dr. Mitchell's arrival natives in the eruptive stage of the disease had been employed in painting the railway premises.

Again during the outbreak of Small-pox at Fraserburg last year, there was a similar divergence of opinion amongst medical men, and the Municipal Council, after a public meeting of rate-payers had been held to consider the question, intimated to the Government that they were about to abandon all measures to prevent the further spread of the disease, as on the advice they had received they did not consider that it was Small-pox. Upon a careful investigation made by the District Surgeon into its nature, and in view of the fact that cases of Small-pox were being diagnosed in other districts, in which the infection was traced to Fraserburg, the Government came to the conclusion that the disease was Small-pox, and, as a result of our representations to the Local Authority, the latter decided to treat the outbreak as being of that nature; this it did for a time, but, later on, it again concluded that the disease was not Small-pox, and discontinued all further precautions; fortunately, however, by this time the outbreak had been arrested.

Only quite recently, in the case of an outbreak at Caledon, the same diversity of medical opinion as to its nature occurred, and I was asked to send a Government Medical Officer at once to settle the point.

In all such outbreaks there is only one safe rule to be pursued by Local Authorities, and that is to treat the disease as being the one of major importance, namely, Small-pox.

Effect of Vaccination on the Disease.

The sure test of the true nature of the disease is the effect on it of vaccination in preventing or modifying its attacks, and the effect which it itself has on vaccination in rendering a person unsusceptible. With regard to the effect of vaccination on the disease, this is manifested both in the prevention of attack and in modifying its effects if the disease be acquired. On a former page, in describing particular outbreaks of Small-pox, I have indicated the effects of vaccination on those outbreaks, so that further figures on this matter are hardly necessary. But, if we take the total number of cases of Small-pox which have occurred during the last two years in the Colony and Native Territories, it will be found that of the 1,513 cases, 1,106 occurred in unvaccinated persons and 407 in those who had been prevaccinated, or, in other words, 73 per cent. of the cases were in unvaccinated persons, and only 27 per cent. in prevaccinated persons. But there are good grounds for believing that at least 70 to 75 per cent. of the population of the Colony, generally, have been protected by vaccination or re-vaccination. Therefore, if the disease had attacked vaccinated and unvaccinated persons with equal frequency, then the number of cases in vaccinated and unvaccinated persons, respectively, should have been exactly the reverse to what they actually proved to be, namely, about 1,100 cases in vaccinated persons and 400 in unvaccinated.

Moreover, speaking from actual experience, I have never known any outbreak of the disease, which has not been promptly and effectually brought under control and cut short by the thorough vaccination of all persons in the affected community.

As to the effect of vaccination in modifying the disease, this is shown both in the reduction of the case mortality and in the mildness of the attack. Both of these effects have been illustrated in

the outbreaks already described in this report ;* but, taking again the above-mentioned 1,513 cases, the deaths among the 1,106 unvaccinated persons were 36, giving a death-rate of 3·26 per cent., while in the 407 vaccinated cases there were only 10 deaths, amounting to 2·46 per cent. of cases.

With regard to the effect of the disease on subsequent vaccination, a number of experiments have from time to time been carried out at the instance of this Department, by the vaccination of persons who have recently convalesced from the disease, and, with the exception of the production in a certain number of cases of small solid raised masses of granulation tissue, no typical vaccination vesicle has been obtained.

In the case of the recent disputed outbreak in Fraserburg, a number of such convalescing cases were vaccinated by the District Surgeon, and I append hereto a table showing the results of the test :—

Table giving particulars of certain cases of Small-Pox at Fraserburg which were vaccinated during convalescence, together with the result of the vaccination test in respect of each case :—

No. of Case.	Old Vaccination Scars.	Date of Vaccination Test.	Degree of Previous Eruption.	Result of Vaccination Test.
1	None ...	8.10.05	Moderate scars on face, and abundant on chest.	Slight reaction as shown by small raised vesicles without surrounding zone of inflammation.
2	do. ...	do.	Doubtful case, no eruption or scarring. Probably not Small-pox.	Usual vesicles.
3	do. ...	do.	do.	do.
4	do. ...	do.	Moderate scars on face, abundant on chest.	3 vesicles, but no surrounding zone of inflammation.
5	2 small scars	10.10.05	Moderate scarring on arms, forehead and back. Slight case.	3 small vesicles which disappeared in a few days ; no surrounding zone of inflammation.
6	1 tiny scar	do.	Moderately severe case.	No reaction.
7	2 small scars	26.10.05	Mild attack.	1 small vesicle which aborted.
8	1 scar ...	do.	Mild.	No reaction.
9	2 old scars	do.	do.	do.
10	2 fair scars	do.	Fairly severe.	3 small vesicles which quickly aborted.
11	3 old scars	do.	Mild.	4 small vesicles with slight surrounding zone of inflammation.
12	2 do.	do.	Moderate.	4 small vesicles which quickly aborted.
13	2 scars ...	do.	Mild.	No reaction.
14	do.	do.	do.	do.

*See Beaufort West, on page xxxviii, and Kimberley, on page xl of this report.

It will be noticed that only in cases 2 and 3 did the vaccination test succeed, and as these cases were never seen with an eruption, and no scars were discoverable, the probability is that they had not suffered from Small-pox. In cases 1, 4, 5, 7, 10, 11 and 12 the solid local re-action above-mentioned occurred, while in cases 6, 8, 9, 13 and 14 no reaction whatever took place. It may be added, with reference to this experiment, that the lymph used was previously tested calf lymph, and that all the contacts of these cases of Small-pox, who had been promptly vaccinated with this lymph at the time the cases were discovered, took successfully, with one exception, this being a person who had quite recently been previously vaccinated. Moreover, all those contacts so vaccinated escaped contracting the disease, with the exception of one of them, a woman who was vaccinated while she was incubating the disease, and even in this particular case the effects of the Small-pox were greatly modified. And it may be further mentioned that of those contacts who evaded vaccination, most of them subsequently developed Small-pox.

In gauging the effects of vaccination in this Colony, and when comparing them with the classical statistics of Great Britain and other countries, the fact must not be overlooked that our figures are based upon the results of vaccination with calf lymph, whereas the older statistics of other countries were founded on the results of vaccination with human lymph. There is reason to believe that calf lymph, although affording an enormous degree of protection, in its effect is neither so complete nor so prolonged as that afforded by human lymph. It is also probable that much of the calf lymph manufactured under the climatic conditions of South Africa is not on the whole so efficacious as calf lymph manufactured in the cooler climate of Europe.

But the extent to which vaccination controls Small-pox in this Colony is indicated by the fact that, although the disease is highly infectious, and although the infection is widely disseminated throughout the Colony, as is shown by the number of separate outbreaks that occur, these numbering in 1904, 78, and in 1905, 111, yet no really extensive epidemic of the disease occurs; and the factor upon which this immunity chiefly depends is unquestionably the very high proportion of the population which has been protected by vaccination. For, although on the discovery of an outbreak, efforts are directed towards the isolation of infected persons and for the destruction of infection by disinfection, there is no question that these measures are but very imperfectly carried out, and that if we had to depend solely upon them for the prevention of the disease, its spread would be practically uncontrollable.

That the disease, as we are now experiencing it, is usually exceedingly mild,* is possibly partly due to the effect of climatic

*An interesting illustration of the mildness of small-pox and of the value of vaccination and of the drastic measures formerly adopted in dealing with the disease is afforded by the history, to be found in the "Records of Cape Colony," of an outbreak that occurred in the Cape Peninsula in 1812. Early in this year a Portuguese ship came into Table Bay from want of provisions, with a cargo of slaves. Although presenting a clean bill of health, the vessel was placed in quarantine, and subsequently became the subject of litigation in the Vice-Admiralty Court, and after six weeks was condemned as a prize for forfeiture. During this time many of the slaves perished from the long confinement, and as others were falling every day, they were landed on a favourable health report by the medical officers, but soon after one of them sickened and died of small-pox. This discovery was made on the 5th March, and on the same day all were removed to Paarden Island, which was proclaimed a quarantine station by the Governor, Sir John Cradock, and stringent regulations for arresting the further spread of the disease were promulgated. Nevertheless, it rapidly spread, and was not stamped out until June following, by which time over 50 cases had occurred. But, in the words of the Governor, "the disease itself appears to be of a very lenient nature, and no mortality has taken place." Its arrest was stated to be due to the whole mass of the population having been compulsorily vaccinated, "in spite of a blind infatuation of many of the Malays and free blacks" against the operation. Indeed,

influences, which also manifest themselves in the preparation of calf lymph, making it difficult in the warmer seasons of the year to maintain the virulence of the lymph, and which effect we also see displayed in the seasonal variation of the disease, the prevalence of the disease diminishing usually as the hot months approach, and here it may be incidentally pointed out that in this respect the disease conforms to what is found to occur with Small-pox in Europe. But this mildness is also probably due to the fact that, owing to the highly vaccinated condition of the population, the disease never finds sufficient suitable soil of a thoroughly susceptible community in which to gather epidemic virulence. That it is capable of being as virulent in South Africa as in Europe or elsewhere, is testified by the fact that, in 1881, when it broke out in Cape Town and spread through the Colony and when the community was practically unprotected by vaccination, its type was extremely severe, and the mortality it caused is reported to have been enormous. Moreover, at the present time we occasionally see, especially in the course of some of the larger outbreaks, typically severe cases of Small-pox, confluent and haemorrhagic.

Public Vaccination.

In Annexure C are printed returns of public vaccinations performed during the years 1904 and 1905, shown separately for each district of the Colony Proper and of the Native Territories. During 1904, 48,115 vaccinations and re-vaccinations were performed in the Colony Proper, of which at least 31,533 are known to have been primary vaccinations; while in the Native Territories during the same period 39,489 vaccinations and re-vaccinations were carried out, of which at least 17,319 were known to be primary. These numbers are somewhat below the normal, owing to the circumstance that during this year every effort was made to curtail expenditure on vaccination as on other public services.

so impressed were the inhabitants as a whole, of the value of vaccination, that, to quote from one of the Governor's reports, "Captain Severs, an American captain of the ship, who brought the vaccine matter some time ago, happened to be here, and the townspeople in ardent gratitude presented him with 4,000 dollars, though he had no claim to their favour upon the original circumstance, as he had been already paid."

The regulations promulgated in this outbreak are worth detailing. *Inter alia* they provided that :—

Any person found on Paarden Island was subjected to a penalty of 500 rix dollars and six months' imprisonment; and in case of inability to pay the aforesaid sum, then the offending party "to be corporeally punished according to the exigency of the case."

In whatever house the small-pox was at the moment, or wherever it might hereafter appear, a signal of a small flag or handkerchief was to be posted from the window immediately over or nearest the door.

Immediately on the appearance of the disease in any house a report had to be made to the Fiscal, specifying the age and condition of the person, and no communication with any such house was allowed, except through the officers of health or justice.

Any person leaving an infected house, either for obtaining water or provisions could only do so before 7 o'clock in the morning, and had to be designated by a white handkerchief or piece of cloth round the left arm, and personal communication with any such was strictly prohibited.

Moreover, the whole town was to be considered in some degree in a state of quarantine, and therefore "no person or persons were to appear in the streets except upon very urgent occasions, and such person or persons *must have had either the small-pox or vaccine disease*," under a forfeit of 50 rix dollars. And to give effect to this regulation it was commanded that all venues must cease and all shops be shut, and all wine shops, clubs, societies and associations, of whatever description or denomination, were to be discontinued, even Divine Worship was to be suspended for the period when the regulations were in force. Persons were not even to assemble for the purpose of vaccination; vaccination inoculation was to be administered by means of house-to-house visits.

Finally, the Burgher Senate provided accommodation for such slaves as it was not found possible to accommodate in their masters' houses.

It will be seen that the effect of these regulations was to practically make vaccination compulsory, a most noteworthy fact, when it is remembered that Jenner's discovery of the effect of vaccine lymph had only been made in 1796, and that compulsory vaccination was only enforced in England in 1872, or sixty years after the action taken by the Cape Government.

During 1905, owing to the increased prevalence of Small-pox in the Colony Proper the number of vaccinations performed was considerably greater, and in all 79,116 operations were effected, of which at least 49,857 were known to have been primary vaccinations. In the Native Territories, during the same year, there were 53,411 vaccinations, of which at least 16,611 were known to have been primary.

Thus, during the two years under review a total of 220,131 persons were vaccinated, of which number at least 115,320 were known to be primary vaccinations. In addition to this number, there were also very many persons vaccinated by private medical practitioners, but of these no records are available, with the exception of those performed at Kimberley during 1905 and referred to in page xxxix of this report.

These vaccinations might be compared with the number of births which took place during the same two years, but, unfortunately, the births registered during the year 1905 are not yet available. This, however, is not a matter of such moment, inasmuch as children are not vaccinated immediately after birth, the operation only being required to be done in urban areas within three months of birth, and in rural areas within the next public vaccination taking place after the three months from birth, and as public vaccination is only performed in the rural districts once a year, it follows that a large majority of infants are not vaccinated until the end of their first year or even later. Therefore, it will, in fact, be more correct to compare the vaccinations performed during 1904 and 1905 with the births recorded during the two previous years, 1903 and 1904, which were respectively, for the Colony Proper, including Bechuanaland, 45,895 during 1903 and 48,028 during 1904, or a total of 93,923. From this number, of course, should be deducted a considerable proportion of infants who died before vaccination was undertaken, but even excluding this correction it is at once seen that the number of known primary vaccinations, without counting those performed by private practitioners, was in excess of the number of births. I think it is, therefore, safe to presume that a very large percentage of the children being born in this Colony are being vaccinated within a year, or at most two years, of their birth.

Indeed, we are justified in believing that a very large proportion of the entire population have been vaccinated, and that a considerable proportion of that number have been, at different times, re-vaccinated. This fact is brought out by a consideration of the total number of vaccinations and re-vaccinations which have been performed in the course of public vaccination in the Colony Proper and Native Territories during a long period, such as the past twelve years. During this period no less than 2,139,904 vaccinations have been performed by the Government, which, of course, excludes a large number vaccinated by medical practitioners as well as by local authorities in the course of dealing with outbreaks of infectious disease. At the last Census taken of the Colony in 1904, the entire population, European and Native, of all ages only amounted to 2,409,804.

Proposed Amendment of Existing Vaccination Law.

Nevertheless, in spite of these records, there is yet an appreciable proportion of the population who escape vaccination under the present condition of the law on the subject. By the provisions of the Public Health Amend-

ment Act, it is laid down that every child born in the Colony shall, if born in an urban area, be vaccinated within three months of birth, and if born within a rural area, within that period, or at the date of that public vaccination held in such rural area next after the date of such child attaining the age of three months. So far, the law is satisfactory, but, unfortunately, no adequate machinery is provided for efficiently carrying it out, inasmuch as no effective means are available by which it can be ascertained that a child has been vaccinated or not. A procedure similar to that in force in Great Britain should be in operation in this Colony; that is, on a birth being registered the parents or guardian should be supplied by the Registrar with a Vaccination Form containing blank forms of certificates, which are required to be in due course filled up and returned by the parent or guardian to the Government Vaccinating Officer, who would then be in a position to mark off from his list of births those children who have been vaccinated, and to take steps to have the law complied with in the case of those children who have not been vaccinated. These certificates would be of three kinds, namely, one certifying to successful vaccination having been performed, one certifying to the fact that the operation has been performed but the child found to be insusceptible to vaccination, and a third certifying to the necessity of postponement of vaccination, owing to ill-health or other cause.

Provision has been made in the Public Health Bill for enabling the Governor to frame suitable regulations for effecting the procedure above described.

The administration of public vaccination devolves solely upon the Government, but during times of epidemic, the Local Authority is empowered, under Section 47 of "The Public Health Act No. 4 of 1883," to require any person within the limits of its district, to give proof that he has been successfully vaccinated, and any person failing to give this proof and refusing to allow himself to be vaccinated, is liable to penalty. Under these powers, Local Authorities have in times of epidemic, and acting on the advice of this Department, successfully effected the vaccination and re-vaccination of practically the entire population of their district, and in this way a considerable amount of re-vaccination has been effected.

The absence, however, of definite powers for requiring re-vaccination to be performed in persons in whom there is reason to believe the effect of the original or primary vaccination has disappeared, is a serious omission in the Vaccination Law of the Colony. The protection afforded by vaccination diminishes in course of time, the rate of decrease being greater in some persons than in others, but the period has been fixed by medical men, somewhat arbitrarily, perhaps, at about seven years, when re-vaccination should be performed, but in every case when any person who has not been quite recently vaccinated, is exposed to the known infection of small-pox, such person should be at once re-vaccinated. In England re-vaccination is not compulsory except in the case of the Army and Navy, but in Germany it is made practically compulsory on the people, inasmuch as it is required of all school children at the age of twelve. In all these cases small-pox has been practically banished from the community.

In the new Public Health Bill, so often mentioned in this report, while it is not proposed to go so far as to make re-vaccination compulsory on all, provision has been made for enabling the

authorities to require, under certain conditions, re-vaccination to be carried out in persons who have not been successfully vaccinated within a period of seven years immediately preceding the date of such requirement: (a) in the case of persons arriving at any port or place in the Colony from any port or place beyond the Colony, where small-pox was prevailing at the time of the departure of such person, and (b) in the case of the prevalence or threatened outbreak of small-pox in any district of the Colony. If Parliament consents to grant these powers, there is no doubt that a much more efficient check on the spread of small-pox will then be provided.

In the meanwhile the Minister, always acting with the concurrence of the Local Authority, has proclaimed a Regulation to be in force in certain places and districts of the Colony, such as the Sea Ports and the districts of the Cape Peninsula and Kimberley, providing for the carrying out of re-vaccination on the lines above described. In taking this step the Minister has acted under the powers conferred upon him by Section 15 of the Public Health Amendment Act, 1897, by which he is empowered, in the event of urgent necessity arising from the prevalence or threatened outbreak in any district of any contagious or infectious disease mentioned in Section 38 of the Act, and of which Small-pox is one, to make and proclaim such regulations to be in force within such district as may be required to prevent the outbreak or check the progress of, or eradicate such disease.* Every regulation once made under this section remains in force until specifically repealed by the Governor.

The effect of this regulation has been of the greatest benefit in dealing with outbreaks of Small-pox.

The Cost of Public Vaccination.

The cost of carrying out Public Vaccination by the Government was, for the calendar year 1904, £2,900 0s. 9d., and for the year 1905, £3,780 3s. 4d. The average cost of each vaccination done throughout the entire Colony being, in 1904, 7·94d., and in 1905, 7·01d.

These figures, however, by no means represent the actual cost of vaccination in many individual cases, inasmuch as the average is reduced to the abovementioned low figures owing to the large mass of vaccination performed in the Native Territories, where the cost usually amounts to only one or two pence per operation. In some districts, and especially those more sparsely populated ones, the expenditure is often quite prohibitive, even at the reasonable rates of remuneration under which the District Surgeon is required to perform this duty, namely, at the charge of 7s. 6d. per hour for travelling (reckoning each six miles travelled as being one

* The following is the text of the regulation as promulgated in the Cape Peninsula and Port of Cape Town and the Territorial Waters under the jurisdiction of the Table Bay Harbour Board:—

It shall be lawful for the Medical Officer of Health for the Colony, or any person duly authorised thereto by the Minister, or for the Local Authority within the limits of its District, to require any person at the time being within the area in which this Regulation is in force, to give satisfactory proof that such person has been successfully vaccinated or re-vaccinated within the seven years immediately preceding the date of such requirement, and if any person who shall not give such proof of having been so vaccinated or re-vaccinated, shall refuse or fail to be so vaccinated or re-vaccinated, or in the case of such person being a minor, if the parent or guardian of such person shall refuse or fail to have such person vaccinated or re-vaccinated, such person, or such parent or guardian, as the case may be, shall, on conviction, be liable to a fine of £10, or to one month's imprisonment with hard labour: Provided that this Regulation shall not apply to any person giving satisfactory proof of having suffered from an attack of Small-pox, or producing a Certificate signed by a Public Vaccinator or Medical Practitioner to the effect either (a) that such person is not, at the time being, in a fit state of health to undergo the operation of vaccination or re-vaccination, or (b) that such Public Vaccinator or Medical Practitioner has satisfied himself by not less than three successive unsuccessful vaccinations on such person, performed within a period of seven years from the date of such requirement, that such person is unsusceptible or immune to vaccination.

hour), and 7s. 6d. per hour while actually detained in vaccinating, irrespective of the number vaccinated. The system adopted is that of appointing centres, whereat the District Surgeon attends, at a time and place which has first been made widely known by advertisement, the police, and other means throughout the surrounding area. In every case these centres are carefully chosen by the Resident Magistrate after full consultation with the District Surgeon and others. Nevertheless, with all this care and at these reasonable rates, owing to the distance to be travelled by the District Surgeon, the sparseness of the population, and the difficulty of getting people to attend at such centres, the cost of each separate vaccination is often out of all reason. In support of this statement I may give some examples of the actual cost of vaccination, taken more or less at random from our records. Thus, in the Bedford district, a tour costing £22 16s. resulted in 70 vaccinations, or 6s. 6 $\frac{1}{4}$ d. per vaccination. In the Carnarvon district a tour cost £8 15s. 6d., at which 9 persons were vaccinated, or at the rate of 19s. 6d. per vaccination, and in the same district another tour cost £15 6s., resulting in 51 vaccinations, or 6s. per vaccination. In Butterworth 12 vaccinations cost £3, or 5s. per vaccination. In Kokstad 103 vaccinations cost £41 5s., or 8s. 0 $\frac{1}{11}$ d. per vaccination, and in the same district another tour cost £53 5s., or 5s. 5 $\frac{1}{2}$ d. per vaccination. Again, in the Fraserburg district, a tour ran out at 18s. 8d. per vaccination, and another in the Philipstown district at 8s. 0 $\frac{1}{2}$ d. per vaccination, one in the Riversdale district at 5s. 3d. per vaccination, and one in the district of George at £1 10s. per vaccination.

If we take the results sometimes obtained at single centres, we get even still more glaring results ; thus, at three centres in Bredasdorp, where vaccination was carried out in September, 1904, the vaccinations cost £1 1s. 8d. each ; at four centres in Fraserburg, in June, 1904, the vaccinations cost £1 12s. 10d. each. At the centre, Plaatjes Dam, in the Hay District, in November, 1905, the vaccinations cost £1 9s. 10d. each. At one centre in Robertson, in December, 1905, they cost £1 10s. each. At two centres in Mossel Bay, in November, 1905, they cost, respectively, £1 2s. 6d. and £1 6s. 3d. each vaccination, and at four centres in Alexandria, in 1905, only 1 vaccination was performed and cost £10 4s. 0d. Even when we come to the more populated districts, such as the Cape Peninsula, we find that, in February, 1905, vaccinations at Hout Bay cost 9s. 4 $\frac{1}{2}$ d. each. In 1903, at Durbanville, they cost 8s. 9 $\frac{3}{4}$ d. each and in the Simon's Town district they have cost as much as 5s. 2d. and 7s. 6d. for each vaccination. At Maitland, recent vaccination cost 7s. 8 $\frac{1}{2}$ d. per vaccination.

While vaccination is of great value both to the individual and to the community as a whole, it cannot be contended that it is worth to the country no matter what it may cost: there is a point at which the cost of vaccination passes beyond its economic value to the country, and I think it will be accepted that the rates I have just mentioned have passed far beyond that point. I am not prepared to fix any particular amount which should not be exceeded in the cost of vaccinating: such an amount must necessarily vary in accordance with the district and the particular conditions existing at the time. For example, it would be cheaper to pay even £1 for vaccinating an immediate contact of a case of Small-pox if it could not be done for less, than to isolate and keep such a contact under medical observation for a period of twelve days or a fortnight during which he may be incubating the disease. But

the instances I have quoted are not even of this class, but are examples of ordinary routine public vaccination.

Vaccination by Lay Vaccinators.

As I have said, the cause of these high rates is the fact that persons fail to attend at the appointed centres in sufficient numbers, and, therefore, in practice, it is found in such districts that the only possible means of reaching the people is by a farm to farm and house to house visitation by the vaccinator. But, for a variety of reasons, including the score of economy, it is not possible to employ a medical man on such a duty, and, therefore, the Government have in certain instances found it expedient to undertake the work with the assistance of laymen, a procedure which is legally provided for under the provisions of the Public Health Amendment Act. In all such cases the work is only entrusted to reliable men who have been certified by the District Surgeon or other medical practitioner as capable of performing the operation in a proper manner. Moreover, every such lay vaccinator is strictly required to conform to certain rules laid down for his guidance. Thus no lay vaccinator is allowed to vaccinate at any time or place except such as may be approved of by the Resident Magistrate of the district, nor is he allowed to vaccinate anybody except such as submit themselves *voluntarily* to the operation. He is not allowed to vaccinate any person showing any signs of ill-health. He must keep a correct record of every person vaccinated by him, and in carrying out the operation he must do so in accord with certain specific instructions as regards cleanliness and other matters, which are printed and supplied with every packet of lymph.* It is, moreover, needless to say that no charge whatever is made in respect of any such vaccination. It may be added that, carried out in this manner, the Department has never known of nor had reported to it a single complaint against the operation or its results.

By this means large numbers of persons have been reached in places where, otherwise, they would have had to be left unvaccinated, while, on the other hand, the cost of the work has been surprisingly small. For example, work performed in some of the North Western districts has cost only threepence per vaccination, and in some of the Native Territories it has only cost three farthings and a penny halfpenny per vaccination.

I have mentioned this subject somewhat fully, inasmuch as the employment of lay vaccinators has from time to time led to condemnation, and sometimes to active opposition on the part of medical men. It is, however, difficult to see in what way the Department could in this matter act in the interests of the public other than it has acted. Wherever it is possible for a medical man to be employed at a reasonable rate his services are *always* made use of, but failing this possibility the Government would appear only to have two courses open to it; either to make use of

**Directions for use of Lymph by Laymen.*—1. With a perfectly clean lancet, or other instrument held slightly horizontally, gently scarify the skin in at least four places, each of about the size of a sixpence. The skin must be well penetrated, but care must be taken not to draw blood; if blood should flow freely vaccinate in a fresh place. 2. Break off both ends of the tubes and blow the lymph out on to the scarified places. 3. Rub the lymph well into the scarified surfaces with the flat side of the lancet or other instrument. 4. See that the vaccinated surfaces *are allowed to dry before the arm is covered up*. 5. Exercise scrupulous cleanliness, and clean the lancet or other instrument after vaccinating each person. This can best be done by heating it in the flame of a lamp or candle. N.B. Until used keep the tubes in a cool place and not exposed to the light. The lymph should in any case not be kept long before use, and it should be used immediately the tube is opened.

the lay vaccinator under efficient safeguards, or else to leave the people unvaccinated. The latter course, however, would be incompatible with duty and the interests of the people.

In judging of this question, the fact must not be lost sight of that the Department is strictly limited in its expenditure on vaccination to a specific sum voted annually by Parliament, which is so small (during the present Financial Year it only amounts to £4,000)* as to necessitate the utmost economy in order to make it meet the needs of the work.

Plague.

During the years 1904 and 1905, Plague continued to give anxiety and to cause expense in its suppression. Since its first introduction into the Colony towards the end of 1900, and its first great outbreak in Cape Town in February, 1901, the disease has been almost constantly with us, either in the shape of Plague-infected rodents or of human beings suffering from the disease. Indeed, the Colony has only been free from known infection, either among rodents or human beings, on the four short occasions dating from the 22nd August to the 29th August, 1902; from the 24th October to the 31st October, 1902, from the 4th February to the 11th February, 1905, and from the 11th December to the 18th December, 1905. But, of course, the infection persisted throughout these brief periods of apparent quiescence, and there was no real break of continuity. Nevertheless since the severe epidemic in Cape Town, lasting from the 2nd February, 1901, to the 2nd January, 1902, and that in Port Elizabeth, lasting from the 16th April, 1901, to the 8th July, 1902, the outbreaks of the disease among human beings have been comparatively slight, and have always been thoroughly under control.

The following Table displays the total number of cases of Plague discovered in the Colony from the first occurrence of the disease in October, 1900, until the 31st December, 1905; the number of cases discovered in each locality being given, together with the numbers and rate of mortality occurring among each race attacked:—

*For the new financial year 1906–1907, it is intended to provide on the estimates only £3,500 for Public Vaccination.

TABLE showing the total number of Cases of Plague, number of Deaths from Plague, and the Case Mortality per cent. up to 31st December, 1905, at each place in the Colony where cases of the disease in the human subject have occurred.

CENTRE.	All Races.			European.			Coloured.			Native.			Chinese.			Other Asiatics.		
	Cases	Deaths	Case Mortality per cent.	Cases	Deaths	Case Mortality per cent.	Cases	Deaths	Case Mortality per cent.	Cases	Deaths	Case Mortality per cent.	Cases	Deaths	Case Mortality per cent.	Cases	Deaths	Case Mortality per cent.
Izeli	13	4	30·77	...	...	...	...	...	...	13	4	30·77	...	...	...	...	...	...
Cape Peninsula	764	371	48·56	205	69	33·66	374	214	57·22	157	70	44·59	1	...	0·00	27	18	66·67
Mafeking	2	...	0·00	2	...	0·00	...	...	...	...	...	...	...	...	...	...	...	...
Imvani	1	1	100·00	1	1	100·00	...	...	...	...	...	...	...	...	...	...	...	...
Port Elizabeth	343	183	53·35	69	19	27·54	81	36	44·44	161	102	63·35	*12	8	66·67	20	18	90·00
Uitenhage	5	3	60·00	...	..	...	...	...	...	4	2	50·00	1	1	100·00	...	...	...
Mossel Bay and Ladismith	15	6	40·00	5	1	20·00	9	5	55·56	...	...	...	...	...	...	1	...	00·0
East London...	96	61	63·54	19	4	21·05	5	1	20·00	67	51	76·12	...	...	...	5	5	100·00
King William's Town & Kei Road	44	22	50·00	21	5	23·81	2	1	50·00	19	15	78·95	...	...	...	2	1	50·00
Queenstown	12	10	83·33	...	...	...	...	...	...	12	10	83·33	...	...	...	...	...	...
Grahamstown	1	1	100·00	...	...	...	...	...	...	1	1	100·00	...	...	...	...	...	...
Knysna	1	...	0·00	1	...	0·00	...	...	...	...	...	...	...	...	...	...	...	...
Vessels	10	3	30·00	5	...	0·00	...	...	...	...	...	...	...	...	...	5	3	60·00
TOTAL	1307	665	50·88	328	99	30·18	471	257	54·56	434	255	58·76	14	9	64·29	60	45	75·00

* Includes one Japanese.

Difference of Mortality in different Races.

From the above Table it will be observed that in all, 1,307 cases have been discovered, with 665 deaths, giving a total case mortality of 50·88 per cent. of cases. It will be seen, however, that the proportion of deaths varies considerably in the different races, being approximately from 20 to 35 per cent. of European cases; from 45 to 55 per cent. of coloured; from 50 to 60 per cent. of Native and from 70 to 80 per cent. of Asiatic (Indian and Chinese cases).

I have stated these rates approximately and not as displayed in the average based on the total collected cases occurring in all outbreaks, because some of the figures given in the above Table require certain allowances to be made, before they can be treated as being of identical statistical value. Putting aside those rates which are based on outbreaks having too small a number of cases to be of statistical value, the following considerations must be allowed for. The Coloured cases in Cape Town epidemic include a considerable number of Malays, many of whom are of Asiatic descent, which fact may account for the exceptionally high case mortality which occurred among the Coloured cases during this epidemic. On the other hand, the mortality was particularly low among the Native cases during this outbreak, which was probably due to an exceptionally large proportion of these cases having been of the Bubonic type. The entire community of Natives numbering some seven or eight thousand, were at an early stage of this outbreak, removed from the midst of the City and housed in Locations specially erected for their accommodation, outside the area of infection, where they were housed under constant medical supervision; the conditions under which they lived were thus removed from those which are supposed to specially favour the spread of Pneumonic Plague, and, when the disease was acquired by them, it was usually contracted in the course of their work in Plague-rat infected stores.

But in the case of the two small outbreaks which occurred at Queenstown among the occupants of crowded Native huts, the contrary held, a mortality of 10 cases having occurred among the 12 persons affected, or a case mortality of 83·33 per cent. This was undoubtedly due to the fact that 8 of the cases, all of whom died—were of the Pneumonic type. Again, the very high case mortality exhibited by the Asiatic races, including the Chinese, at Port Elizabeth, is probably partly due to the fact that great concealment of the disease always occurs among these people, with the result that cases are only discovered after death or just before death, when further concealment becomes impossible, so that many mild cases escape detection altogether, and cannot, therefore, be counted.

But after making all due allowances, the fact remains certain that the different races display with perfect constancy very wide differences in their resistance to the effects of the disease, the European being most resistant, the Coloured person coming next in order, the pure Native next, and the Asiatic last; the latter race having a 50 per cent. case mortality more than the European, or a mortality more than twice as great.

Differences in type of the Disease according to Race and Sex.

In the following Table are shown the numbers of each type in which the disease manifested itself among the 1,307 cases above-

mentioned, the figures being given separately for both sexes of each of the four main races, European, Coloured or Mixed, pure Native and Asiatic. Unfortunately, it has not been possible to give the type in the case of every patient, as this was not always recorded.

Plague in Cape Colony: Race and Sex of Cases, and Type of Plague from which they suffered :—

RACE.	Bubonic.			Pneumonic.			Septicæmic.			Unspecified.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Total.
European ...	217	75	292	19	6	25	3	1	4	5	2	7	244	84	328
Coloured ...	266	155	421	24	9	33	4	3	7	7	3	10	301	170	471
Native ...	275	54	329	64	23	87	6	3	9	8	1	9	353	81	434
Asiatic, including Chinese	55	6	61	8	1	9	3	0	3	1	0	1	67	7	74
Total ...	813	290	1,103	115	39	154	16	7	23	21	6	27	965	342	1,307

From this it will be seen that there were 1,103 cases of the Bubonic type, or 84·39 per cent. of the cases; 154 cases of the Pneumonic type, or a percentage of 11·78; 23 cases of the Septicæmic type, or 1·76 per cent. of the whole number. There were, of course, a number of cases in which the disease did not conform strictly to any one of these types, thus, a Bubonic case might develop Pneumonic symptoms, or a Septicæmic case might occur with evidence of a primary bubo. But in all such cases the disease has been classified, as far as it could be, according to its original character, and not on the symptoms which it afterwards developed.

It will also be observed from this Table that certain types of the disease are somewhat more common in one race than another, but the proportions are nevertheless remarkably similar for the different races. Thus, of every 100 cases of Europeans 89·03 were Bubonic, 7·62 were Pneumonic, 1·22 Septicæmic and 2·13 unspecified. Of every 100 cases of Coloured, 89·38 were Bubonic, 7·01 Pneumonic, 1·49 Septicæmic and 2·12 unspecified. Of every 100 Native cases, 75·81 were Bubonic, 20·05 were Pneumonic, and 2·07 each were Septicæmic and Unspecified; while of the Asiatics and Chinese, 82·43 were Bubonic, 12·16 Pneumonic, 4·06 Septicæmic, and 1·35 unspecified. So that the Bubonic type is relatively more common among European and Coloured persons, the Pneumonic type is greatly more common among Natives, and the Septicæmic among Asiatics, who also have a large proportion of Pneumonic cases. The very similar incidence of the different types on the Coloured and European is of great interest in view of the much greater case mortality experienced in Coloured cases as compared with European.

It will also be noticed that, taking the sexes, there was no greater proportion of Bubonic cases among males than females, or that females, as has been supposed, display a greater proportion than males of Pneumonic cases. The exact figures per 100 cases of each sex being 84·25 Bubonic, 11·92 Pneumonic, 1·66 Septicæmic and 2·17 unspecified in the case of males, and for females 84·80 Bubonic, 11·40 Pneumonic, 2·05 Septicæmic and 1·75 unspecified.

These results are of great interest in connection with the theory that the conditions under which persons live or work specially affect the tendency to contract the disease or to determine the type. It has been supposed that a greater proportion of Pneumonic cases would occur among these communities, such, for example, as the Asiatic, living under conditions of great overcrowding in insanitary dwellings, and that also the Bubonic type should be most common among males who would more often acquire the disease at their place of work, and among Europeans who live under better conditions than do Natives and Asiatics. They also have a distinct bearing upon the flea theory of the conveyance of the disease, into which, however, it is impossible for me to enter here.

I regret that, owing to absence of data regarding the population, it is impossible to demonstrate the exact proportionate incidence upon the male and female population, respectively, of the areas in which outbreaks of Plague have taken place.

Plague in 1904 and 1905.

In the two years covered by this Report, only 67 (17 European and 50 Coloured) cases of Plague occurred in 1904, and 81 (16 European and 65 Coloured) in 1905. In these years, cases of Plague occurred at Port Elizabeth, East London, King William's Town, Queenstown and Uitenhage. The subjoined Table shows the number of cases and number of infected rodents and other animals found at each place during each month of these years.

I would take this opportunity of emphasising the important fact that in dealing with Plague we are not dealing with an ordinary infectious disease confined to human beings, but our measures have, in the case of Plague, to be mainly directed to attacking an infected rat population living underground and in the most inaccessible places. To the sanitarian the question of human cases is here of subsidiary importance to that of rat infection. It is necessary to refer to this as the public in criticising expenditure are apt to overlook this important fact.

TABLE showing the occurrence of Plague in the Colony during the Years ended 31st December, 1904, and 1905.

Month.	Port Elizabeth.					East London.					King William's Town.					Queenstown.					Uitenhage.				* Knysna.		* Grahams-town.	
	No. of Cases.		No. of Infected Animals.			No. of Cases.		No. of Infected Animals.			No. of Cases.		No. of Infected Animals.			No. of Cases.		No. of Infected Animals.			No. of Cases.		No. of Infected Animals.		No. of Infected Animals.		No. of Infected Animals.	
	E.	C.	Rats.	Mice.	Cats.	E.	C.	Rats.	Mice.	Cats.	E.	C.	Rats.	Mice.	Cats.	E.	C.	Rats.	Mice.	Cats.	E.	C.	Rats.	Mice.	E.	C.	Rats.	Mice.
1904.	January ...	...	2	3	1	...	1	2	7	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	February ...	...	1	15	118	...	...	...	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	March ...	...	11	88	61	1	...	...	1	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	April ...	...	3	368	57	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	May ...	...	2	128	52	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	June ...	...	4	125	49	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	July ...	...	3	86	34	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	August ...	...	1	90	63	...	...	...	103	79	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	September ...	...	3	122	40	...	...	...	120	82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	October ...	...	2	27	16	...	...	...	76	11	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	November ...	...	2	122	39	...	...	...	14	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	December ...	...	2	13	33	...	2	5	15	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	14	39	1187	563	6	3	7	341	195	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1905.	January ...	...	2	13	11	...	...	2	15	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	February ...	...	...	6	5	...	...	1	92	13	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	March ...	...	1	45	34	...	5	8	89	15	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	April ...	...	...	13	12	...	2	12	92	12	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	May ...	...	1	20	20	...	2	12	96	28	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	June ...	...	...	19	7	1	2	6	35	7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	July ...	...	1	16	29	...	1	2	48	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	August ...	...	3	26	5	...	...	...	8	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	September ...	...	...	10	7	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	October ...	...	2	17	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	November ...	...	...	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	December ...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2	10	186	151	3	12	43	475	95	15	2	9	387	60	5	...	...	...	...	...	...	...	...	...	...	...	...

* No case of Plague occurred in human beings during above period.

Cleansing and Disinfecting Schemes.

During the years 1903-1905, very extensive schemes of cleansing and disinfection were carried out, first at King William's Town, then at East London and, finally at Port Elizabeth. The scheme at King William's Town was begun on the 28th May and ended on the 1st August, 1903, costing approximately £2,000. That of East London began on 22nd September, 1903, and ended on the 1st March, 1904, costing £6,045 14s. 8d ; while the scheme at Port Elizabeth, which was undertaken by the Plague Board, under the guidance of this Department, and for which a special grant of £10,000 was assigned by the Government, was commenced on the 7th November, 1904, and concluded on the 13th April, 1905. The entire scheme cost £10,116 15s. 0d. At the conclusion of this scheme, steps were taken to deal with certain communities collected at Korsten and Dassies Kraal, just beyond the boundaries of the Port Elizabeth Municipality, into which places large numbers of Natives and Coloured persons had migrated in consequence of the demolition and closing of insanitary buildings in Port Elizabeth during Plague operations. As far as the Natives were concerned, all those falling under the operation of "The Native Reserve Locations Act, 1902," were forced to remove into the New Brighton Location, while the remainder of the population were compelled to improve their premises, which at that time were of the most wretched description, so that great sanitary improvement in these areas has been effected.

Speaking generally, the effect of these comprehensive and systematic schemes of cleansing and disinfecting has been satisfactory, although Plague infected rodents have continued to be found from time to time at Port Elizabeth, East London, and King William's Town. It remains, however, to be seen whether the disease will be permanently stamped out in these areas, and, personally, I doubt, as I have from the first doubted, whether this happy consummation will be reached. It may be said that, against such an opinion may be set the experience of Cape Town, where for nearly four years past no recurrence of Plague infection has taken place. But while admitting this, I am bound also to confess that no satisfactory explanation has yet been forthcoming as to how this extraordinary result has been achieved. Certainly, during the outbreak, which occurred in 1901, a large amount of cleansing and disinfecting was carried out, but not more than a very small proportion of the then Plague-infested area was dealt with in this manner ; much of it remained untouched, as, indeed, is manifest when it is remembered that Plague infection existed among rodents, and human cases occurred from Sea Point on the one hand, through Cape Town, Woodstock, Mowbray, Claremont and Wynberg to Simon's Town on the other, and while there is reason to believe that some of the intervening areas were not extensively affected by Plague rodents, enormous tracts of the inhabited portion of the Peninsula were attacked. Yet, in spite of this, the disease died away, apparently through natural causes, the nature of which we know little, a few months after its first commencement, and from that time to this there has been no recurrence. I may say that this result is entirely opposed to the experience of other countries. In India and the East, the disease has come apparently to stay, at any rate for some time ; in Mauritius, the same thing has occurred ; while in Australia, where the disease appeared almost simultaneously with its first occurrence in Cape Colony, the most optimistic opinions were at one time expressed

as to the disease having been stamped out, yet from that time to this frequent outbreaks have occurred in all the Australian Colonies, and at the present moment the disease still exists in New South Wales and Queensland.

The cost of Plague.

A statement will be of interest as to the total expenditure which has been incurred upon the suppression of Plague in the Colony, since its first occurrence in the latter part of 1900, to the end of the Financial Year 1905-06, and I accordingly append a return shewing this expenditure under several main heads. It has been divided into the periods from 1900 to the end of the Financial Year, 30th June, 1904, and for the two Financial Years covered by this Report, from 1st July 1904 to the 30th June, 1906. From this return it will be seen that the total expenditure has amounted to a sum of over £600,000, or to be accurate £603,922 9s. 2d.

This enormous sum was brought to account in the following amounts in each Financial Year :—

			£	s.	d.
1900-01	...	...	207,059	5	6
1901-02	...	...	257,366	11	1
1902-03	...	...	48,138	4	9
1903-04	...	...	45,441	13	4
1904-05	...	...	32,295	6	6
1905-06	...	...	13,621	6	0
Total ...			603,922	7	2

But the major portion of the expenditure was actually incurred during the year 1901, that is, during the early part of the first great outbreaks in Cape Town and Port Elizabeth. Indeed, a considerable amount of the expenditure brought to account even in the last two years, has been expenditure incurred in the early days of Plague which had not until recently been adjusted. It would be impossible, without great labour, to allocate the expenditure to the different years in which it was actually incurred, but it is a fact that the expenditure during the last four or five years has been extremely moderate in view of the magnitude of the work carried out. As a matter of fact, a very large portion of the earlier expenditure was undertaken, although with the best intentions, as a result of scare. It would now serve no purpose and, indeed, would be invidious, to single out particular items as having been useless expenditure ; it will suffice to say that Local Authorities, Plague Boards and the Public as a whole, demanded the undertaking of all manner of extravagant action, and that the difficulty which the permanent officials of the Government had to contend with was to control public expenditure which was being incurred on all sides without authority and without any reasonable grounds that it would prove of the slightest utility. It must be admitted, however, that a great deal of the expenditure was incurred on special expert advice, which serves to demonstrate the expense and danger attending a system under which an expert gave advice, doubtless good in itself, but which, given without any knowledge of the particular needs and financial conditions of the Colony, and blindly taken by the public as being the last word on the subject, led to useless and extravagant outlay.

Of course, this earlier expenditure was not all waste ; a large portion of it was expended on useful and legitimate measures of precaution, and could not, with the best judgment and the strictest supervision, have been avoided.

Moreover, a considerable amount has since been recovered in the way of sales of surplus buildings and stock, amounting in the aggregate to some £36,000, or more, and also at this moment the Government possesses several valuable assets in hand, as, for example, the Ndabeni Native Location at Maitland, which was chiefly provided out of Plague Funds ; the present valuable site of fifty acres at Maitland on which the new Alexandra Hospital is about to be erected ; valuable Hospital buildings in the Peninsula and elsewhere, and a considerable amount of valuable steam disinfecting machinery.

But apart from these assets, the Plague and the scare which it caused resulted in effects of incalculable value to the Colony, which, at the price of over half a million and with the loss of life which has been caused by the disease, may yet be considered to have been cheaply acquired, for it brought about an immediate and widespread quickening of activity in Public Health and Sanitation, and brought home to Local Authorities the need for improvement in their methods. In Cape Town alone, the sanitary advancement caused by the advent of Plague has been incalculable, and in other large towns a like result has taken place.

Moreover, it solved, once and for all, the problem which had become in Cape Town and Port Elizabeth one of vital importance to the health of the community, namely, the indiscriminate residence among the White population of uncivilized Natives. Under the stimulus of Plague, the Government, acting boldly and without specific legal powers, decided to remove all such Natives into Labour Locations outside the cities, and the benefit of this action was at once so marked as to have formed the basis of the Native Reserve Locations Acts which have since been passed by Parliament.

If, therefore, the gain and loss due to Plague be taken into consideration, I am confident the balance will be found to be very largely on the side of the gain.

PLAGUE EXPENDITURE.

	Salaries and Allowances.		Transport.		Disinfectants, Machinery and Disinfecting Tools.		Buildings and Rent.		Furniture and Equipment.		Provisions and Medicines. Plague Prophylactic.		Fuel and Light.		Clothing and Bedding.		Payments for Rats Destroyed.		Compensation.		Miscellaneous.		Total.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
CAPE PENINSULA.																								
1900-1904 ...	153,841	8 5	19,304	2 8	30,576	14 7	103,327	10 11	37,869	3 6	29,358	18 10	2,590	11 4	4,156	16 6	889	16 0	5,688	7 10	8,239	12 8	395,843	3 3
1904-1906 ...	3,736	3 6	853	11 10	1,032	5 10	...	...	25 16 6	6	3 14 2	2	84	11 9	...	...	1,668	18 6	13 10 4	4	522	12 5	7,941	4 10
1900-1906 ...	157,577	11 11	20,157	14 6	31,609	0 5	103,327	10 11	37,895	0 0	29,362	13 0	2,675	3 1	4,156	16 6	2,558	14 6	5,701	18 2	8,762	5 1	403,784	8 1
PORT ELIZABETH.																								
1900-1904 ...	55,986	10 11	3,473	3 7	977	9 1	10,592	5 4	3,203	19 9	7,380	12 8	1,275	10 3	603	0 11	201	0 5	256	10 4	925	13 3	84,875	16 6
1904-1906 ...	17,659	12 4	994	1 5	1,625	8 7	...	...	23 5 9	9	672	5 11	435	10 7	...	...	0	6 6	45	2 0	579	14 7	22,035	7 8
1900-1906 ...	73,646	3 3	4,467	5 0	2,602	17 8	10,592	5 4	3,227	5 6	8,052	18 7	1,711	0 10	603	0 11	201	6 11	301	12 4	1,505	7 10	106,911	4 2
EAST LONDON.																								
1900-1904 ...	14,688	4 4	431	6 3	503	3 10	2,235	4 8	205	9 11	1,642	5 10	0	1 9	...	...	692	6 10	322	0 0	585	16 11	21,306	0 4
1904-1906 ...	6,556	8 2	884	2 8	247	0 10	...	...	51 4 11	11	335	13 8	91	6 1	...	...	0	3 9	452	16 8	1,524	13 5	10,143	10 2
1900-1906 ...	21,244	12 6	1,315	8 11	750	4 8	2,235	4 8	256	14 10	1,977	19 6	91	7 10	...	...	692	10 7	774	16 8	2,110	10 4	31,449	10 6
KING WILLIAM'S TOWN.																								
1900-1904 ...	4,891	12 10	895	17 9	380	3 1	482	18 1	340	10 0	1,633	10 6	2	18 0	12	15 3	1,066	1 5	32	10 5	156	8 5	9,895	5 9
1904-1906 ...	3,010	9 10	92	6 9	37	1 8	...	...	5 12 1	1	31 5 6	6	5	15 3	...	...	...	...	25	0 0	45	12 6	3,253	3 7
1900-1906 ...	7,902	2 8	988	4 6	417	4 9	482	18 1	346	2 1	1,664	16 0	8	13 3	12	15 3	1,066	1 5	57	10 5	202	0 11	13,148	9 4
ALL OTHER PLACES.																								
1900-1904 ...	13,863	7 9	2,782	0 0	18,933	4 7	1,887	17 10	1,224	15 7	1,739	11 10	63	10 2	17	13 11	1,620	10 10	161	2 0	3,791	14 4	46,085	8 10
1904-1906 ...	1,644	11 9	156	18 9	53	8 0	...	...	124	7 1	110	5 3	6	14 3	...	...	360	2 7	10	0 0	76	18 7	2,543	6 3
1900-1906 ...	15,507	19 6	2,938	18 9	18,986	12 7	1,887	17 10	1,349	2 8	1,849	17 1	70	4 5	17	13 11	1,980	13 5	171	2 0	3,868	12 11	48,628	15 1
WHOLE COLONY.																								
1900-1904 ...	243,271	4 3	26,886	10 3	51,370	15 2	118,525	16 10	42,843	18 9	41,754	19 8	3,932	11 6	4,790	6 7	4,469	15 6	6,460	10 7	13,639	5 7	558,005	14 8
1904-1906 ...	32,607	5 7	2,981	1 5	2,995	4 11	...	...	230	6 4	1,153	4 6	623	17 11	...	...	2,029	11 4	546	9 0	2,749	11 6	45,916	12 6
1900-1906 ...	275,878	9 10	29,867	11 8	54,366	0 1	118,525	16 10	43,074	5 1	42,908	4 2	4,556	9 5	4,790	6 7	6,499	6 10	7,006	19 7	16,448	17 1	603,922	7 2

Enteric Fever.

Enteric Fever, although of frequent occurrence, especially during the warmer months of the year, was perhaps not quite so prevalent during the years 1904 and 1905 as had been the case for some years previously.

In the Colony Proper, during 1904, 2,408 cases of Enteric Fever were notified by medical men to Local Authorities and by the latter to this Office, in accordance with the provisions of Section 29 of "The Public Health Amendment Act, 1897."

During 1905 the number notified was 1,541. The vast majority of the notifications related to Europeans, most of the Native and Coloured cases escaping notification, as they rarely seek medical advice when ill.

Although compulsory notification is in force in certain small areas of the Native Territories, the results are so trifling that they may be entirely neglected as an index of the extent of the prevalence of the disease.

As to the thoroughness of notification even in the Colony Proper it is the experience of this Office that in every outbreak of the disease which it has been necessary to personally investigate, there has always been discovered a considerable number of cases which had escaped notification. For this reason, therefore, the above figures are only to be accepted as a mere indication of the actual facts.

The causes of the occurrence of Enteric Fever in South Africa are often obscure. Of course, there are a considerable number of outbreaks in which the cases are obviously due to the previous pollution of water supplies by Enteric excreta, but putting on one side such outbreaks, there remains a very large number of instances in which the occurrence cannot be accounted for in this manner. A certain number of such cases are due to commencing infection, owing to the neglect by the other members of the household, in which there is an infected person, to take the precautions necessary for the prevention of infection, or, indeed, to take the precautions dictated by ordinary instincts of domestic cleanliness. Other cases, though smaller in number, may be due to the conveyance of infection through contamination of food by wind-borne infected dust, or by the visitation of flies after contact with some infective material. But after allowances are made for these means of conveyance there still remain instances of sporadic cases which appear year after year in the same area as soon as the climatic conditions arrive which are favourable to the occurrence of the disease. Careful enquiry into the origin of such cases fails to elicit any sources, other than the most hypothetical ones, of the infection. As illustrating broadly such occurrences, I may state that, during each of the past two years, the following cases occurred in the Peninsula Municipalities :—

			1904.	1905.
Sea Point ...	...	...	16	9
Cape Town ...	...	...	135	92
Woodstock ...	...	...	74	40
Mowbray ...	...	...	31	15
Rondebosch ...	...	...	14	5
Claremont...	...	...	39	50
Wynberg ...	...	...	75	18
Kalk Bay ...	...	...	19	3
Simonstown ...	...	...	5	8
Maitland ...	...	...	15	7
Total	...	...	423	247

So far as Sea Point and Cape Town are concerned, the sanitation is such that none but imported cases of the disease should occur, while in the other Municipalities mentioned, Typhoid should ordinarily be of rare occurrence. Careful enquiry into such cases has rarely served to demonstrate any positive cause of the infection, although many causes are often suggested which full investigation fails to support, such as, dirty household water tanks, defective drains, unclean premises and the like.

Reviewing the whole of the circumstances, one is forced to the conclusion, in the absence of the discovery of any definite cause, to believe that there must be some unknown factors endemic to certain infected localities, which serve to retain for indefinite periods the infection of the disease, and to cause cases to arise whenever the suitable climatic or other conditions occur.

An interesting instance of such an infected locality is afforded by the incidence of the disease upon a block of buildings situated in the Municipality of Molteno. This block, which is in the best part of the town and consists of ten erven in two rows of five each, is bounded on all four sides by streets. On the first erven is situated the Standard Bank and dwelling house, on the second a dwelling house and two shops, on the third and fourth a dwelling house and a shop on each, on the fifth and sixth a dwelling house on each, on the seventh two dwellings, on the eighth a dwelling, on the ninth two dwellings and on the tenth a dwelling and a mineral water factory. In all there were thus twelve dwellings, four shops and a factory.

The number of persons ordinarily living in these premises is 46, of whom 37 are European and 9 Coloured, and the incidence of Enteric Fever upon this community during the past five years has been as follows:—

In the year 1901,	1 case
„ 1903,	8 cases
„ 1904,	7 „
„ 1905,	3 „
and in the first three months of 1906,	3 „

Thus, in all, 22 cases occurred during this period, all of whom were Europeans. If the two rows of erven be numbered consecutively 1—10, beginning with the first row and then back to the second row, the occurrence of the cases in the different erven was as follows:—

In No. 1,	2 cases in 1904
„ 2,	2 „ „ 1906
„ 3,	3 „ „ 1904
„ 4,	2 „ „ 1904
„ 5,	no cases
„ 6,	3 cases in 1903
„ 7,	1 case in 1903
„ 7,	2 cases in 1905
„ 8,	1 case in 1901
„ 8,	4 cases in 1903
„ 9,	1 case in 1905
„ 9,	1 „ „ 1906
„ 10,	no cases.

There being thus two cases on the Standard Bank premises, but none at all on the two adjoining erven at the other end of the two rows, on one of which is the soda-water factory.

This extraordinary incidence of 22 cases, in five years, in an average population of 46 persons, becomes of particular interest when it is compared with the incidence of the disease upon the rest of the town, the total population of which, excluding the inhabitants of this block, is 2,679, among whom, during the same period, only 74 cases of Enteric Fever were notified, of which 69 were Europeans and 5 were Coloured. Therefore, while among the inhabitants of this block a proportion amounting to 47·8 per cent. were attacked by the disease in the course of five years, in the town the rate of attack was only 2·8 per cent. Or, if we compare the two races, then we find that while the European attack-rate in this block was 59·5 per cent. and nil for Coloured, it was for Europeans living in the rest of the Town only 6·7 per cent. and for Coloured 0·3 per cent.

The District Surgeon of Molteno, who was asked for a report on this matter, has favoured me with the following remarks :—

“The Block in question has for years past had cases of Enteric Fever breaking out in it, sometimes in one house, sometimes in another. New residents, especially new-comers to the Colony, are attacked after living there for a short time. In my opinion the sub-soil of the yards and premises of this Block is infected with Typhoid germs. Each year when fresh cases occur proper care in disinfecting bedclothes etc. used by the patients is not adopted, the slops being allowed to be spilled or thrown out in the yards.”

“There were also in this block a large number of cesspools, which I doubt very much were all emptied properly and cleaned out, when the pail system was introduced.”

Some water-borne outbreaks.

During the two years, several water-borne outbreaks came under the notice of the Department and were investigated. One within the Municipality of French Hoek, which has a population of 1,305 persons, 642 Europeans and 663 Coloured, commenced in October, 1904, and within a period of four months following, no less than 61 cases occurred, 37 being Europeans and 24 Coloured. Investigation of the outbreak by Dr. Thornton, an Officer of this Department, shewed that it was due to the pollution of drinking water conveyed by the village furrows. The matter was strongly represented to the Council, with the result that, although at first some opposition was manifested by the inhabitants, a pure supply of water was brought into the town by pipes, and there has been since no recurrence of the disease.

Another outbreak at Still Bay, which commenced towards the end of 1905, also serves to illustrate the magnitude of the danger resulting from improperly protected sources of water supply. In this case, during last Christmas Holidays a European family arrived at Still Bay—a small hamlet situated at the mouth of the Kaffir Kuils River, in the Riversdale District, and a favourite Summer resort with the inhabitants of the surrounding districts. A member of this family was ailing on arrival and was found a week later to be suffering from Enteric Fever. At this time but few of the dwellings in the hamlet were provided with proper closet accommodation, and the drinking water was obtained from a number of shallow wells in the vicinity of the houses. Within a few days of the

discovery of the first case of Enteric Fever, thirty-five other cases occurred, all in European visitors, except in one case, a Coloured servant. On investigation by a medical officer of this Department the conclusion was arrived at that the epidemic was due to the recent infection of one of these wells belonging to a much frequented boarding-house, either by the case above-mentioned or by convalescent enteric patients, who had earlier been residing in the boarding-house which this well adjoined. Of the thirty-five cases eleven sickened in this house and fourteen in three other houses, but which were also dependent on this same well for their drinking water. The remaining ten cases occurred in nine other houses supplied by different wells, but of these cases eight had partaken of gingerbeer or other similar drinks manufactured with water from the same infected well, while another had on at least one occasion drunk water from this well. As to the remaining case no definite connection with the infected well could be traced. This particular well was situated at the side of a lean-to structure attached to the boarding-house. At the time of the epidemic it appears that there had been gross overcrowding in the house; eighteen ladies being accommodated in an attic, containing only 1,944 cubic feet of air space, and situated immediately above the lean-to, over which one of the windows in the attic opened. The attic was not easy of access and the bedroom slops were consequently thrown out of the window on to the roof of the lean-to structure, from which they drained off directly into the well. A sample of the water from this well was bacteriologically examined in this office and was found to be extremely polluted with animal organic matter.

Four of the patients in this outbreak died.

The Divisional Council, on advice from this Office, is taking steps to provide a proper water supply and to inaugurate measures of sanitation which it is hoped will prevent a recurrence of such a disastrous experience as the above.

Enteric Fever at Petrusville.

As an example of case to case infection, I may mention the recent outbreak which occurred at Petrusville. The population of this village, according to the 1904 Census, was 555 Europeans and 467 Coloured persons, but it has probably increased slightly during the last two years. During the first half of 1905, there appears to have been a mild epidemic of Enteric Fever in the village, which was variously treated by the medical practitioners resident therein as Simple Continued Fever, Low Fever, or Sleepende Koors. Towards the end of the year the disease again appeared, and attacked within a few months 53 Europeans and 5 Coloured persons. The outbreak was investigated by Dr. Mitchell, the Assistant Medical Officer of Health for the Colony, who reported that, although the source of infection of the original cases was not clear, most of the patients who subsequently became ill were infected from case to case. No action whatever had been taken by the Local Authority at the commencement of the outbreak, largely owing to the fact that the disease was not suspected at first of being Enteric Fever. The case incidence amongst the Europeans, if the last census figures are taken as representing the present population of the village, was 9.55 per cent., and amongst the Coloured inhabitants 1.07, or in the entire population. 5.68 per cent. The smaller incidence amongst

the Coloured inhabitants appears to have been partially due to the fact that some of the cases escaped detection owing to the mildness of the disease, but it may be stated that the Inspector found no reason to believe that such cases were in any considerable number.

Diphtheria.

During the two years covered by this Report, Diphtheria has not been very prevalent, and no large outbreaks have occurred. During 1904, 1,154 cases were notified throughout the Colony Proper, and in 1905, 565 were notified.

As a rule, very indifferent measures are taken by Local Authorities to deal with outbreaks of this disease: when action is taken the favourite plan appears to be that of quarantining the entire household until the patients either recover or die. As a protection to the rest of the community, this may in some degree be effective, but it is certainly the best means of spreading the disease to the remaining members of the household. Very few Local Authorities take measures to remove such patients from their houses and isolate them.

So far as the Government is concerned, ample supplies of reliable Diphtheria Anti-toxin are immediately forwarded to Resident Magistrates and District Surgeons on outbreaks of the disease being notified to this Office, and it is recommended that not only shall the patients be treated with the serum, but that prophylactic inoculations should be performed on those persons who are compelled to remain in direct contact with persons suffering from the disease. The serum is provided free for the use of paupers, and its actual cost, only, is recovered in those cases where the patient is able to pay.

Measles

At intervals of several years, severe epidemics of Measles, usually accompanied by epidemics of Whooping Cough, spread throughout the Colony. In these outbreaks, the disease is of remarkable virulence and intensity, attacking a very large proportion of the community, not only of children but also adults, but causing its chief ravages among the Native population, where it often raises the death rate of a district in which it prevails, to a remarkable extent, the majority of the deaths being ascribed to Bronchitis and Pneumonia. During such epidemics there is practically little that the Government or any Local Authority can do to stay the spread of the disease, inasmuch as isolation of cases is a practical impossibility, and, even were this measure to be undertaken, it is a question whether it would sensibly diminish the attacks, as the infection appears to be largely conveyed from the sick to the healthy in the earliest stages of the complaint, and, therefore, usually before its nature is diagnosed. Even the simple measure of closing schools can rarely be carried out with advantage in the control of this disease.

On several occasions the Government has been asked to proclaim the disease a notifiable one under the Public Health Acts, but after mature consideration and acting with the advice of the Colonial Medical Council, it has not been deemed desirable to adopt this step, mainly on the ground that to include the disease within

the provisions of the existing Public Health Acts would entail its being dealt with on exactly similar lines as apply to the other more important and more controllable diseases, such, for example, as Plague and Small-pox, a circumstance which, in view of the futility in the case of Measles of precautions suitable to those diseases, would involve a useless expenditure.

To meet the case of Measles and some other of the communicable diseases which require special and simple measures for their suppression rather than the exercise of the elaborate existing machinery of the Public Health Acts, provisions have been included in the proposed Public Health Bill to enable the Governor from time to time by Proclamation to apply particular measures of precaution to such diseases, without placing them under the category of infectious diseases as at present understood by the existing Acts, and also to empower the Governor to require notification to be made to school authorities by parents or guardians of children when any child under their care and attending school is suffering from infectious or contagious disease.

Epidemic in the Colony.

During the early part of 1904 an epidemic of measles of a severe character commenced in the Colony and was continued during that year and well into 1905.

In April, 1904, a few sporadic cases of the disease occurred in that portion of the East London Municipality which is situated on the West Bank of the Buffalo River. A large number of mild cases followed, and by the end of the year hardly a house in this portion of the town had escaped from becoming infected. In December, 1904, and January, 1905, the disease appeared on the East Bank, and spread rapidly, the neighbouring municipality of Cambridge and the district generally also becoming widely infected. By the middle of 1905 the epidemic had developed into a fairly severe one, although no large number of deaths appears then to have resulted directly from the disease. The exact number of cases could not on enquiry be ascertained, but in the two municipalities it was estimated that at least 2,000 cases of the disease had occurred, and in the district, where the disease was apparently present in a severer and more fatal form, it was considered that there was at least an equal number of cases.

From the East London district the disease appears to have spread to and have infected nearly the whole of the Eastern Province and Native Territories. At Mount Ayliff, especially, it appears to have been present in an unusually severe form. The District Surgeon deals with the outbreak in his Annual Report, which will be found printed on page 170, where he states that in sixteen kraals, which he visited in the course of an investigation into the matter, he found 87 cases of measles, with 16 deaths, and in fifty-four other kraals, where he was unable to ascertain the number of cases, there had actually been 57 deaths.

Towards the close of 1905 the disease had reached most districts in the Colony and Native Territories, and early in 1906 the epidemic appears to have waned.

The exact statistics cannot, of course, be ascertained, for the disease, as has already been observed, is not notifiable under the provisions of Sections 28 and 29 of the Act No. 23 of 1897, nor can the actual number of deaths be at present ascertained, for the

Report of the Registrar-General of Statistics for 1905 is not yet available, and even though it were, the figures in regard to Measles would be of very little value, for in most cases deaths from the disease, at any rate in the case of Natives, are uncertified. It seems fairly certain, however, that Measles has caused an unusually large number of deaths during 1905, not only amongst young children, but also amongst those past the prime of life. Its effect will doubtless show itself in the increased numbers of deaths recorded as having occurred from chest complaints.

Owing to representations from many centres that the disease was largely being spread through the agency of the schools, a Circular Letter was despatched to all Resident Magistrates during the last Christmas holidays, asking for full particulars of the disease, and enquiring whether it was recommended by District Surgeons that the dates of the re-opening of State-aided schools should be postponed.

The general opinion expressed by District Surgeons was to the effect that the disease was on the decline, and, with few exceptions, it was considered that the closure of the schools would not be likely to assist in checking the further spread of the disease. Except, therefore, in regard to a few schools, which it was considered advisable to temporarily close, it was arranged that schools should re-open, but that as far as possible returning scholars should be required to produce a certificate from a reliable source certifying that they and their homes were free from infection, and also that school teachers should be notified of the desirability of being on the watch for children showing suspicious symptoms, and to prohibit the attendance of any such children until all signs had disappeared.

Puerperal Fever.

The number of notifications of cases of Puerperal Fever made to the Government by Local Authorities throughout the Colony, under the provisions of Sections 28 and 29 of the Public Health Amendment Act, 1897, amounted to 51 in 1904, and 65 in 1905. Three other known cases in each year escaped notification, and were brought to the notice of the Government on the death of the patient, which occurred before coming under the observation of any medical practitioner. The total number of cases brought to the notice of the Government was, therefore, 54 in 1904, and 68 in 1905. Of the 54 which occurred in 1904, 26 were European and 28 Coloured, and of those in 1905, 32 were European and 36 Coloured. In 1904 the total number of deaths registered in the chief towns of the Colony as having been due to this disease was 38, of which 12 were European, and 26 other than European. The births during the same period amounted to 17,979, of which 8,308 were Europeans, and 9,671 Coloured. These figures, therefore, give a rate of mortality per thousand of confinements of 1.44 for Europeans, and 2.69 for Coloured, or, in other words, 1 in every 694 European women confined died of Puerperal Fever, and 1 in every 372 of Coloured women. It may be regarded as certain that these figures are incomplete, and, of course, they indicate in no way the number which recovered, many of whom are doubtless destined to suffer from the effects of the disease for the rest of their lives. The Birth and Death Returns for 1905 are not yet available.

Unsatisfactory Nature of Present Legislation.

I have repeatedly drawn attention to the unsatisfactory position of the Government and of Local Authorities in regard to the prevention of Puerperal Fever. This was well exemplified in the cases which occurred at Wynberg, and were detailed in my Report for the half year ended 30th June, 1904.

Section 9 of Act No. 7 of 1899 enacts that "if any person in practising midwifery for profit shall through uncleanness or failure to take the precautions ordinary or proper for preventing or safeguarding against Puerperal Fever cause *injury* or serious *ill-health* to any lying-in woman," he or she shall be liable to the fine or imprisonment provided, but the Section expressly provides that a conviction shall not be a bar to an indictment for culpable homicide in case the patient dies. The Legislature, therefore, clearly recognizes the existing Common Law as rendering a midwife, communicating fatal Puerperal Fever through uncleanness or failure to take ordinary precautions, liable to be convicted for culpable homicide. The effect of the Statute is, therefore, that the midwife should be at once charged with culpable homicide, if death results in a patient who has contracted Puerperal Fever owing to her carelessness or uncleanness. If the patient is not dead, the midwife should be charged under Section 9 of Act 7 of 1899. If, pending the proceedings, the patient dies, or shall die after sentence, the midwife should be charged with culpable homicide.

It is, however, difficult to bring home evidence to the effect that a midwife has in any particular case neglected to take precautions ordinary and proper for preventing or safeguarding against Puerperal Fever. Under Section 28 of "The Medical and Pharmacy Act, 1891," the Colonial Medical Council is empowered to frame "rules and directions for regulating the steps to be taken by Medical Practitioners and certified midwives for preventing the spread of Puerperal Fever or other similar disease," and any Medical Practitioner or certified midwife who shall contravene any such regulations or directions is liable, on conviction, to pay a fine of not exceeding £20, or to imprisonment, with or without hard labour, for a period not exceeding three months. The difficulty, however, lies in the fact that it is not the Medical Practitioner nor the certified midwife—who, it may be mentioned, only gets her certificate from the Council after passing a thorough examination—who should be required to conform to definite rules and regulations, but it is the uncertified and unskilled midwife for whom they are necessary, and whom, did such regulations exist, it would be tolerably easy to bring to account if she neglected them, and on these grounds the Medical Council has hitherto declined to issue such rules and directions applying only to qualified Practitioners and midwives while the unskilled midwife would continue unrestrained.

To meet this difficulty, provision has been made in the Public Health Bill, whereby the Governor may proclaim regulations to be observed by *any* person practising midwifery for gain, for the purpose of preventing the spread of Puerperal Fever or other infection to lying-in women or new-born infants, and entailing a penalty in the event of contravention.

It will be seen from what I have said that, at the present time, neither the Government nor the Local Authority is able to do much in this important matter, nor have either of these authorities even the power to prohibit a midwife from attending on midwifery

cases if she herself is suffering from some Septic disease or is at the time being, or has recently been attending a case of Puerperal Fever, Erysipelas or other infectious disease dangerous to the parturient woman.

So far as I am aware, no prosecutions have ever taken place under the abovementioned provisions of the Medical and Pharmacy Act of 1891, and only two prosecutions have been instituted against midwives for culpable homicide. One of these was in the district of Wynberg and the charge was afterwards withdrawn on account of the extreme age of the midwife, and the other was at Somerset West Strand, prosecuted in the Circuit Court of the district of Paarl, which resulted in an acquittal.

Procedure at present followed.

Recognising, however, the extreme necessity for doing *something* to control this important matter, this Office has for some time past adopted the practice in respect of every case of Puerperal Fever notified to it by Local Authorities, or otherwise coming to its knowledge, of addressing to the Medical Man reporting the case a letter of enquiry as to the probable means by which the infection was conveyed to the patient and whether any midwife was in attendance, and, if so, whether the disease was, in the Medical Practitioner's opinion, due to any ignorance or neglect on the part of such midwife. On receipt of such information, further enquiries, if thought necessary, have been always instituted of friends and relatives of the patient, or through other channels, in order to obtain the fullest particulars.

This procedure was followed in all of the 122 cases of Puerperal Fever abovementioned, and in no less than 47 of the cases, the disease was directly attributed by the Medical Attendant to carelessness or uncleanness on the part of the midwife in attendance, while in three of the cases the source of infection could also be fairly attributed to the midwife, in view of the facts recorded in this Office as to her past career; in 13 of the cases the source of infection was believed to be due either to uncleanness of the patient or to her insanitary surroundings; in 14 the cause was unknown, but the midwives were exonerated from any blame in the matter. Regarding the remaining 45 cases, no particulars could be obtained.

Whenever we have had information of two or more cases of Puerperal Fever occurring in the practice of the same midwife, we have adopted the system of warning the midwife to abstain from attending any lying-in woman for a period of at least a month thereafter, and also of cautioning her as to the necessity of thoroughly disinfecting herself and her clothing, and for the exercise of scrupulous cleanliness in the future. But, as I have said, there is no means by which we can insist upon our warnings being paid attention to. Nevertheless, there is reason to believe that such warnings do, on the whole, act as a wholesome deterrent in many cases.

Some Examples.

It is worth while mentioning, as examples, some of the facts brought to light in the course of these enquiries. Thus, at Somerset East, in a case of Puerperal Fever, it was ascertained that the

patient had been attended by a Coloured midwife who was at the time suffering from Syphilitic ulceration of the nose, and the Fever was considered by the Medical Practitioner to have been due to infection conveyed from this source. It was believed that this woman had had other cases of Puerperal Fever in her practice, although this it was not found possible to prove, but she was warned in the ordinary way to discontinue attendance on other cases.

At Oudtshoorn, a Coloured midwife, unclean and filthy in her person and suffering from an ulcerating cancer of the breast, caused a case of Puerperal Fever, which, however, was fortunate in ultimate recovery. This woman has had several fatal cases recorded in her practice as a midwife.

At Kimberley, a Coloured midwife attended a confinement, the patient dying of Puerperal Fever. Within an hour after this she attended another woman, who also contracted the disease, but fortunately recovered. Here again steps were taken to collect information for a prosecution, but, unfortunately, although the probabilities from a medical aspect pointed strongly to the midwife having conveyed the infection, from the narrower legal standpoint the evidence was insufficient to warrant proceedings being taken against her. It was believed that about this time this midwife was the cause of another case of Puerperal Fever, the truth of which, however, could not be proved.

At Aliwal North, our enquiries into a case of Puerperal Fever shewed that the disease had occurred in a one-roomed hovel, which was described as dirty, squalid, badly ventilated and entirely unfit for human habitation. In this room the patient's husband was lying incapacitated from Tubercular disease of the Lungs, while another inmate, a child, was suffering from Measles. In this case, of course, the disease was attributed to the filthy surroundings, but the enquiry was beneficial in that it resulted in the Town Council taking action and causing the premises to be closed pending re-erection.

But, perhaps, the most glaring case is that of a midwife practising in the Peninsula in co-operation with her two daughters. A case attended by this woman recently died from Puerperal Fever and on applying to the Medical Man who was called in after the event, he furnished ample facts for attributing the infection to the action of the midwife, which facts were subsequently testified to on affidavit by the husband. The particular point in regard to this case is the previous career of this midwife, as far as the limited records of this office are able to shew, but what may possibly not be recorded can be surmised.

Towards the end of 1901, this midwife attended a Coloured woman in Frere Street, Cape Town, who died of Puerperal Fever.

In September of the same year, the Resident Magistrate, Cape Town, held an inquest on a European woman, who was attended by this midwife.

In October following, another inquest was held by the Magistrate, Cape Town, on the body of a woman and her infant child, also attended in her confinement by this midwife. The facts brought to light in these two inquests were such that the papers were sent to the Colonial Medical Council for report, who decided that "there was not sufficient evidence in either of these two cases to show conclusively the cause of death, although the person employed as midwife was guilty of great want of care and negligence."

In the middle of 1904 a Coloured woman, living in the Dock Cottages, was attended by the same midwife, and a Medical Man was called in just as the patient was expiring. This doctor stated that he learned that the woman had been in labour all day and had sunk from exhaustion, and from other sources it was found that during this time there had been prolonged and excessive hæmorrhage.

Towards the end of the same year a Coloured woman in Van der Leur Street, Cape Town, was attended during confinement by this midwife, with the result that Puerperal Fever ensued; the patient, however, in the hands of a qualified Medical Practitioner, subsequently recovered.

Towards the middle of 1905 a European lady was received into this midwife's house, where she was confined, and two days later developed Puerperal Fever. Her friends, discovering her condition, caused her to be removed to a hospital, where she died a few days later.

A little later in the same year a European woman at Woodstock was attended by the same midwife, with the result that Puerperal Fever supervened, and the patient died a few days after.

These, with the case first mentioned, constitute a list of eight occurrences, each of which on enquiry disclosed facts of the greatest suspicion implicating the midwife, but, so far, she has escaped legal proceedings, and there is every probability of her continuing her dangerous career unchecked.

Tuberculosis and its spread.

As in previous reports, I have again to call attention to the prevalence of Tuberculosis in the Colony and to its ravages, especially among the Coloured and Native population. I have so fully dealt with this subject in former years that I would not revert to it in this report, were it not that I consider the question of such great importance to the future health of the people, that no opportunity should be neglected of impressing the facts upon the public mind.

Mortality from Tuberculosis in the Chief Towns.

In the following Table I give the figures for the year 1904, in respect of forty-one of the larger towns of the Colony, the information relating to 1905 not being yet available. It is probable that these figures for 1904 are the most reliable on the subject that we have yet had, or are likely for some time to come to get, inasmuch as, owing to the Census enumeration of the population having been made on the 17th of April in that year, we are able to obtain a fairly reliable estimate of the populations at the middle of 1904, on which to calculate the rates of mortality occurring in the different towns from the disease. In preceding years, and as will be again the case in subsequent years, we have had to estimate the probable population by calculating each rate of increase on the figures obtained in the two previous Census enumerations, but as the interval between the two Censuses is very great, and as the urban populations of this Colony are subjected to extreme fluctuation by reason of immigration and emigration, such calculations must be necessarily unreliable and often obviously wide of the mark.

In the subjoined Table relating to the forty-one chief towns of the Colony, in the term "Tuberculosis" are included not only Phthisis and Consumption, but all forms of Tubercular disease, including intestinal and meningeal. In the Table are also given, for comparison, the numbers of deaths and rates of mortality, in each of the urban centres, which have occurred from "Bronchitis" and "Pneumonia," for there is reason to believe that a considerable number of such cases were also of Tubercular origin, especially among those in which the diagnosis was not medically certified. The number of uncertified cases among Europeans is not great, being only 10 out of a total of 651, 6 of these 10 being registered as Tuberculosis, and 4 of Bronchitis or Pneumonia. Among the Coloured, however, 489 out of a total of 3,130 were uncertified, 154 of these being registered as Tuberculosis and 335 as Bronchitis or Pneumonia. It will be observed that, as a rule, the mortality from Bronchitis and Pneumonia is proportionally high in those towns in which the mortality from Tuberculosis is also extreme.

In a separate column of the Table, I have furnished, for comparison, corresponding figures relating to Tuberculosis during the preceding year 1903, from which it will be seen that, both in the case of Europeans and Coloured, the calculated rate of mortality was somewhat less in 1904 than during 1903, the death rate for all towns having been, for Europeans, 1·64 in that year, as compared with 1·54 per thousand of the population in 1904; while for the Native and Coloured population, it was in 1903, 8·09 as compared with 6·82 per thousand in 1904. This diminution is probably more apparent than real, as it is chiefly due to a decrease in the rates in Cape Town and the Peninsula Municipalities, and in Port Elizabeth and East London, it being probable that in these large centres the estimated populations for the year 1903, upon which the mortality rates of that year are calculated, were less than actually existed at the time; there being good grounds for believing that the populations in these and certain other centres, had been diminishing between 1903 and 1904 consequent upon the depression following the War, rather than increasing as, if the calculated populations are correct, should have been the case.

TABLE showing for each of the Forty-one Chief Towns of the Colony the Rates of Mortality from (a) Tubercular Disease, and (b) Bronchitis and Pneumonia, per thousand of the European and Coloured populations during the year 1904.

NAME OF TOWN.	Estimated Population middle of 1904. (Census taken in April, 1904.)		Tuberculosis (including Hæmoptysis).						Bronchitis and Pneumonia.			
			No. of Deaths, 1904.		Death Rate per 1,000 of Population, 1904.		Death Rate per 1,000 of Population, 1903.		No. of Deaths, 1904.		Death Rate per 1,000 of Population, 1904.	
	E.	C.										
Cape Town	44,677	33,631	81	213	1·81	6·33	1·56	8·52	49	176	1·10	5·23
Suburban Municipalities (i.e., Woodstock, Mowbray, Claremont, Wynberg, Maitland and Rondebosch)	53,602	31,523	79	186	1·47	5·90	1·80	8·91	63	200	1·18	6·34
Green Point and Sea Point	7,654	1,380	7	6	0·91	4·35	0·57	3·03	4	1	0·52	0·72
Simon's Town and Kalk Bay- Muizenberg.	7,076	3,318	12	16	1·70	4·82	1·06	5·63	7	16	0·99	4·82
Kimberley	13,574	20,878	34	143	2·50	6·85	2·30	7·52	19	219	1·40	10·49
Beaconsfield	2,770	6,594	4	64	1·44	9·71	0·70	8·70	...	120	0·00	18·20
Port Elizabeth	22,201	10,990	26	57	1·17	5·19	1·55	15·14	24	54	1·08	4·91
East London	14,995	10,872	12	44	0·80	4·05	0·87	3·42	14	46	0·93	4·23
Grahamstown	7,336	6,662	9	50	1·23	7·51	1·26	8·39	8	65	1·09	9·76
Uitenhage	6,777	5,612	10	51	1·48	9·09	0·47	12·63	8	78	1·18	13·90
Paarl	5,090	6,289	3	43	0·59	6·84	0·82	5·86	9	48	1·77	7·63
Graaff-Reinet	4,083	6,105	5	48	1·22	7·86	0·76	6·55	16	116	3·92	19·00
King William's Town	5,919	3,639	7	21	1·18	5·77	1·89	2·56	8	25	1·35	6·87
Queenstown	4,209	5,570	13	19	3·09	3·41	3·75	3·31	3	53	0·71	9·52
Oudtshoorn	4,196	4,773	9	50	2·14	10·47	3·50	9·55	13	63	3·10	13·20
Worcester	3,626	4,318	4	38	1·10	8·80	0·86	9·21	4	33	1·10	7·64
Cradock	3,087	4,760	10	33	3·24	6·93	3·38	5·27	11	66	3·56	13·87
Beaufort West	2,231	3,319	14	47	6·28	14·16	8·88	18·55	5	25	2·24	7·53
Aliwal North	1,779	3,900	4	8	2·25	2·05	2·95	3·10	2	41	1·12	10·51
Somerset East	1,866	3,410	2	30	1·07	8·80	1·12	4·92	4	64	2·14	18·77
Stellenbosch	2,530	2,478	1	25	0·39	10·09	0·00	4·89	1	11	0·40	4·44
Wellington	2,437	2,499	4	9	1·64	3·60	0·43	7·09	2	24	0·82	9·60
Mossel Bay	1,676	2,588	1	24	0·60	9·27	3·13	6·98	2	16	1·19	6·18
Malmesbury	1,988	1,856	2	21	1·01	11·31	1·58	7·17	2	6	1·00	3·23
George	1,840	1,692	3	18	1·65	10·64	1·67	12·85	3	16	1·63	9·46
Caledon	2,107	1,472	2	9	0·09	6·11	*	*	...	10	0·00	6·79
Robertson	2,054	1,216	2	13	0·97	10·69	2·01	8·51	2	10	0·97	8·22
Burghersdorp	1,295	1,627	4	17	3·09	10·45	0·80	9·58	4	19	3·09	11·68
Victoria West	1,190	1,614	2	12	1·68	7·43	*	*	5	52	4·20	32·22
Colesberg	979	1,708	1	21	1·02	12·30	*	*	3	26	3·06	15·22
Riversdale	1,144	1,518	...	19	0·00	12·52	*	*	3	10	2·62	6·59
Aberdeen	1,644	944	2	5	1·22	5·30	*	*	3	8	1·82	8·47
Swellendam	1,148	1,273	...	5	0·00	3·93	0·00	2·40	...	7	0·00	5·50
Bedford	754	1,533	1	9	1·33	5·87	*	*	...	23	0·00	15·00
Prince Albert	1,037	749	...	5	0·00	6·68	1·99	9·35	7	4	6·75	5·34
	240,571	202,310	370	1,379	1·54	6·82	1·64	8·09	308	1,751	1·28	8·66

* Information not available.

As compared with England and Wales.

It is, unfortunately, impossible to make any accurate comparison between the amount of Tubercular disease occurring in the urban centres of this Colony and that taking place in England and Wales. Tubercular disease attacks the two sexes unequally, and also occurs with greatest frequency at certain ages of life, therefore, unless we are able to compare and make corrections for differences in the age and sex composition of the population of our towns with the population of England, no exact comparison can be instituted. But this cannot be done, owing to the fact that the age groups under which the populations of the Colonial towns were tabulated at the last Census enumeration do not accord either with the age groups under which the deaths are recorded in the

Colony, nor with the age groups adopted by the Registrar-General in England and Wales.*

It may be stated, however, that the annual death rate from Phthisis and other forms of Tubercular disease in England and Wales during the decennium 1881-90 amounted for the entire population to 2·42 per thousand, since when it has been steadily falling, and in the year 1902, it amounted, taking the English corrected death rate, to only 1·62 per thousand. Therefore, without speaking with certainty, I think we may take it that at present, as far as Europeans are concerned, the general mortality from Tuberculosis among the European inhabitants of our towns, *taken on the whole*, is not in excess of what obtains in England and Wales, but that among the Coloured and Native population it is at least four times as great as the English rate. This statement, however, does not represent the entire truth, for Tuberculosis in this Colony is a disease of comparatively recent origin, and, therefore, the normal condition should be a very small occurrence of the disease. While in England and Wales the prevalence of Tubercular disease varies only within very narrow limits in different parts and towns of the Kingdom, in this Colony the very widest differences exist between the different towns as regards the prevalence of the disease and the races chiefly affected. Thus, taking the mean mortality occurring in the towns as a whole, we find that the mortality among Europeans in all of the Peninsula Municipalities, except Cape Town, Simon's Town and Kalk Bay, is below the mean, this being the case also at Beaconsfield, Port Elizabeth, East London, Grahamstown, Uitenhage, Paarl, Graaff-Reinet, King William's Town, Worcester, Somerset East, Stellenbosch, Mossel Bay, Malmesbury, Caledon, Robertson, Colesberg, Riversdale, Aberdeen, Swellen-

* The groups of age periods adopted in the Colonial Census of 1904 for the tabulation of the population in the urban centres are as follows :—Under 5 years, over 5 and under 15 years, over 15 and under 20, over 20 and under 35, over 35 and under 50, over 50 and under 70, over 70 and under 85, 85 and over. The groups adopted for the recording of deaths in this Colony are as follows :—Under 5 years, over 5 and under 10, over 10 and under 15, over 15 and under 20, over 20 and under 25, over 25 and under 30, over 30 and under 35, over 35 and under 45, over 45 and under 55, over 55 and under 65, over 65 and under 75, over 75 and under 85, over 85.

Those adopted for statistical purposes in England are similar to those in this Colony for the recording of deaths, except that two periods, that over 25 and under 30, and that over 30 and under 35, are grouped in one period over 25 and under 35, and the period over 75 and under 85 is merged in the group 75 and over.

It will be seen from this comparison that we can only apply our Death Registrations to the Census population group of under 5 years ; we can also, by combining the two periods 5 to 10 and 10 to 15, compare it with the Census group 5 to 15 years ; also that the Registration group 15 to 20 years would compare with the Census group 15 to 20 years. Thereafter we can combine the three groups 20 to 25, 25 to 30 and 30 to 35, in the Census group 20 to 35, but from 35 years upwards no comparison whatever can be made, as the groups adopted by the Census are totally different from the Deaths Registration groups.

The necessity for making a correction for age composition will be demonstrated by a consideration of the figures given in the following Table, which shows the number of deaths per million of the population in England and Wales during the decennium 1881-90 from Phthisis and other Tubercular diseases at each of the age groups 0 to 75 :—

	0-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75 and upwards
Phthisis ...	536	290	521	1545	2324	2901	3132	2737	2169	1355	521
Other Tubercular Diseases ...	3963	554	306	229	171	128	107	94	94	83	48
Total ...	4499	844	827	1774	2495	3029	3239	2831	2263	1438	569

It is obvious from this that in a population having an age preponderance of young adults between the ages of 25 and 45 years, a great amount of Phthisis should be expected, as these are the years when the greatest mortality from this form of the disease takes place ; whereas in a population containing a large number of children under 5 years, a large mortality from other Tubercular complaints might be expected, as over two-thirds of the total number of deaths resulting from these complaints occur at that period of life.

dam, Bedford and Prince Albert ; but it is also, as far as Europeans are concerned, above the mean in Cape Town, Simon's Town and Kalk Bay, Kimberley, Queenstown, Oudtshoorn, Cradock, Beaufort West, Aliwal North, Wellington, George, Victoria West and Burghersdorp, and in some of these places there is an extremely high rate of mortality. In Aliwal North it is 2·25, in Kimberley 2·50, in both Queen's Town and Burghersdorp 3·09, in Cradock 3·24, and in Beaufort West no less than 6·28 per thousand of the European population.

Also, in the case of the Native and Coloured populations, taking the mean for all towns as 6·82 per thousand of the population at all ages, we find that Sea Point, Simon's Town and Kalk Bay, East London, Queen's Town, Swellendam, Aliwal North, and Wellington, while still exhibiting a very high rate of mortality, are considerably below the mean ; and that Cape Town and the remaining Peninsula Municipalities, Port Elizabeth, King William's Town, Caledon, Aberdeen, Bedford and Prince Albert are only slightly below the mean ; and Kimberley, Paarl, and Cradock are practically the same as the mean. On the other hand, Beaconsfield, Graham's Town, Uitenhage, Graaff-Reinet, Oudtshoorn, Worcester, Beaufort West, Somerset East, Stellenbosch, Mossel Bay, Malmesbury, George, Robertson, Burghersdorp, Victoria West, Colesberg and Riversdale are above the mean, and many of these to an enormous extent. Thus, in Stellenbosch, the mortality from Tubercular disease amounted in 1904 to 10·09 per thousand of the coloured population, in Burghersdorp to 10·45, in Oudtshoorn to 10·47, in Robertson to 10·69, in Malmesbury to 11·31, in Colesberg to 12·30, in Riversdale to 12·52, and in Beaufort West to 14·16, the last-mentioned town again affording the highest death rate from Tuberculosis, both among the European and coloured populations. A reference to the rates of mortality for the preceding year 1903 demonstrates that, with some exceptions, the excessive prevalence of the disease in these towns has continued from the previous year. It will also be observed, as I have already pointed out, that these towns also show the greatest mortality from Bronchitis and Pneumonia.

Apart, however, from the proof of the exceeding prevalence of Tuberculosis which is afforded by the general mortality statistics of the Colony, the same tale is told if we investigate the state of particular communities regarding which we are in possession of special means of information. As examples of such, I will take the instances furnished by our gaols, by a certain large religious institution and by the Railway Sick Fund.

Tuberculosis in our Gaols.

In the gaols and convict stations of the Colony Tuberculosis was the cause in 1904 of 44 deaths out of a total of 135, thus constituting 32·59 per cent. of all deaths, and in 1905 it caused 31 deaths out of a total of 98, or 31·63 per cent. of all deaths, the actual death rate per thousand of annual units under confinement having been from this cause in 1904, 8·6, and in 1905, 5·9, rates which are even in excess of those obtaining in the free population.

Example of the occurrence of Tuberculosis in a private community.

In a certain religious community situated in one of the larger towns of the Colony, I have, through the courtesy of the Heads of

the Institution, been placed in possession of information regarding the occurrence of Tuberculosis among its inmates, who consist at the present time, of fifty ladies, of whom forty-three sleep on the premises and seven in houses outside. In this community, during a period of twenty years ending towards the close of 1905, there have occurred no less than 43 deaths, of which as many as 24 were caused by Tuberculosis, the cause of death in the remaining 19 being given as, 2 Pneumonia, 1 Inflammation of the Spine, 3 Peritonitis, 6 Fever, 3 Enteric and 1 each of Cancer, Heart Disease, Degeneration of Liver and Pelvic Abscess. The ages of the deceased ranged from 19 to 46 years, the great majority of them ranging between 20 and 35. The number of deaths from Tuberculosis represents, assuming that the number of inmates has maintained an average of 50 throughout the twenty years, which was probably not the case, an average annual rate of mortality of 24 per thousand. Of course, this rate of mortality did not rule in every year, it being in some years much greater and in others much less, or none at all. It must, however, be mentioned that this Institution is treated somewhat as a Sanatorium into which inmates from kindred institutions in South Africa are drafted. But, in this connection, it must also be added that, in 12 cases, the disease is stated to have first manifested itself some time after the person joined the Institution, the period of prior residence in these cases varying between one and twenty-five years, and in most over five years. In the remaining twelve cases, the disease is stated to have commenced in the year of joining the Institution, or no particulars are available.

It may be mentioned that this Institution is maintained with every regard to health, there being an appointed Medical Officer, and the dormitories, of which there are three, afford ample cubic space, in every case exceeding 800 cubic feet per inmate.

Tuberculosis among Railway Employees.

Enquiries have recently been instituted into the prevalence of Phthisis among certain of the contributors to the Cape Government Railway Sick Fund, the enquiry having been suggested by a report by the Railway Medical Officer of Beaufort West, to the effect that he had been struck with the prevalence of Phthisis among European foremen, which he was inclined to attribute to the confined offices and cabins in which they have to work, and to infection by means of the common use of telephone mouthpieces.

The enquiry consisted in ascertaining in regard to each Railway Medical "Section" the number of cases which had occurred among such employes during the past five years, 1901-1905, with the age, race, sex, occupation and probable place of infection in each case.

The information could not in all cases be rendered completely, and the Railway Medical Officers of Vryburg, De Aar, Touws River, Claremont, Kalk Bay, Salt River, Wynberg and Cape Town were able to render no returns at all, as no records had been kept; while those of Mafeking, Alicedale, Cookhouse, Willowmore, Rosmead Junction, Avontuur, Wellington, Sea Point, Darling, Stellenbosch, Worcester, Grahamstown, Oudtshoorn and Uitenhage rendered "nil" returns.

With regard to the remaining Sections, the following cases were notified:—

Kimberley, 5 cases, all European males, 2 employed in the Traffic Department, 1 in the Accounting Office, the other two not stated.

Bulawayo, 9 cases, all Europeans, 7 being males and 2 females, 3 of the former being clerks in the Traffic and Loco. Departments, 1 a Foreman, 1 a checker, 1 a ganger and 1 a storeman ; while of the females, 1 was a fitter's wife and the other a chief clerk's wife. In all of the cases the disease is said to have commenced in the British Isles.

On the East London System, 39 cases are reported, all of them being Europeans with the exception of 3 Kafirs, 2 of whom were labourers on the Cookhouse Line and 1 a Loco. coal boy at Fort Beaufort. All of these three contracted the disease in the Colony. Of the 36 European cases, 28 were males and 8 were females. Of the male cases, 13 were clerks, nearly all in the Traffic Department, 4 were checkers in the Traffic Department, 1 was a number taker, 2 were wagon examiners in the Loco. Department, 2 were constables, 2 fitters, 1 smith, 1 a ganger in the Maintenance Department, 1 an apprentice, and 1, a boy of 11 years, whose father was employed as a railway ganger. The females were, 1 the daughter of an engine driver, and the others wives of a blacksmith, a carpenter, gangers (2), a fireman, a station master, and a checker, the latter being one of the checkers included among the affected males, from whom the wife is stated to have acquired the disease. Of the Europeans, the disease is reported to have been acquired in the Colony in 13 of the cases, abroad in 15 of the cases, while in 8 it is unspecified.

In the Cradock Section, 3 European males were reported, 1 being a booking clerk, 1 a brass finisher and the other a painter. The origin of the disease is not stated.

At Port Elizabeth, 1 European male and 1 Coloured male were reported, the first being a painter and the second a porter, no further information being given.

At Graaff-Reinet, 2 European males, 1 a clerk and the other a checker.

In the Naauwpoort Section, 10 Europeans, all males, were reported, 6 being clerks, 1 an electrical mechanic, 1 a blacksmith, 1 a painter and 1 a fitter. The place is not stated, except in the case of one, the painter, who contracted it in South Africa. The electrical mechanic is reported to be suffering from Laryngeal Phthisis, and his duty is to attend to the telephones.

In Malmesbury, 1 Coloured male, a porter.

In Caledon, 1 Coloured male, a labourer.

At Laingsburg, 4 European males, 2 being clerks, 1 a foreman and 1 a station master ; where contracted not stated.

At Grootfontein, 1 European male, stationmaster. No other information given.

At Matjesfontein, 3 European males and 1 Coloured female. All three of the Europeans were employed, curiously enough, in the Refreshment Department, one looking after the coffee stall. No further information is given.

At Prince Albert Road, 6 Europeans, 4 being females and 2 males. Of the males 1 was a checker and 1 was a clerk. Of the females, 1 was the wife of the stationmaster, 1 the wife of the checker already mentioned and 2 the wives of labourers, 1 at 55 Cottage and 1 at 59 Cottage.

At Fraserburg Road, 5 are reported, all Europeans, 3 being males and 2 females. Of the males 1 was a clerk, another a checker and the other an engine driver. Of the females 1 was the wife of a shunter and the other the wife of a foreman.

At Beaufort West, 10 cases were reported, 1 being Coloured and the other 9 Europeans, all males, the Coloured man being a porter in the Traffic Department, while of the Europeans 5 were foremen, 1 a checker, 2 clerks, and 1 a coffee stall attendant. Five of the cases are stated to have contracted the disease in the Colony, 2 in Rhodesia, 2 in England, and the remaining one is not recorded.

The above reports—incomplete as they manifestly are—demonstrate the excessive prevalence of Phthisis among a section of the Railway employés. Moreover, the great majority of the cases are in clerks and others engaged on indoor employment. The proportion of clerks and foremen affected is very much greater than in the case of other employés. A large number of the cases, in regard to whom this information is available, have contracted the disease in the Colony, but what is equally certain is that a large number came to the Colony with the disease upon them, probably immigrating on that account. In two cases, at least, the females acquired the disease from their husbands who also suffered from the disease during the five year period under review, which is a large proportion, when the comparatively small number of cases and the short period covered by the enquiry is taken into consideration. Four of the cases occurred in the coffee stall or refreshment rooms, three of these being at one station.

Its Lessons applied to the Colony generally.

I have detailed the above figures at length as the enquiry brings out facts of great importance in their application to the general consideration of the prevalence of Tuberculosis as affecting the whole Colony.

Although the enquiry necessarily confined itself to Railway employés, this class is not peculiar in regard to the occurrence among its members of Consumption; but, on the contrary, what obtains among Railway employés may be expected to be taking place among the general population, and there, probably to a greater degree.

A point to be noted is the magnitude of the danger resulting to the inhabitants of this Colony from the steady influx of persons suffering from Tuberculosis, seeking an asylum on account of the climatic advantages it affords in the treatment of the disease, and it illustrates the need for controlling the entrance of such persons into the Colony, and for ensuring that, when admitted, proper precautions will be taken for preventing them spreading the disease, and above all that they do not employ themselves in duties wherein they must inevitably be a danger to their fellow workers.

The influence which the immigration of such persons has upon the community which they join is indicated very clearly in the cases of those towns most frequented by those Phthisical strangers seeking the climatic benefits of the Colony. In such places the mortality from Tuberculosis is persistently high, year after year, not only among the European but also in the Coloured population. As examples of this may be quoted the high rates of mortality from this disease prevailing in Beaufort West, Queenstown, Burghersdorp, Cradock and Kimberley.

In the next place, it demonstrates the fact that, however advantageous the climate of this Colony may be in the treatment

of the disease, it offers no bar to its spread, which, in the absence of proper precautions, is sure and rapid.

Finally, it suggests the question whether the disease may not often be spread by telephone mouthpieces used indiscriminately by infected and healthy persons. This question becomes something more than of Departmental interest when it is remembered how extensively the telephone is employed by the public, and the danger that especially may arise in connection with the use of Public Telephone Call Offices. This matter has for some time been claiming my attention, with a view to devising some means by which the mouthpieces of the instruments can be simply and adequately disinfected after each use.

Testimony of Medical Officers to the increasing Prevalence of Tuberculosis.

But, apart from statistics, we have the constantly recurring testimony as to the increasing prevalence of the disease furnished by medical men and others in the Colony who are in a position to speak authoritatively on the subject. During the course of the year many such reports, spontaneously rendered, reach me. To many persons such evidence is of more interest than mere statistics, which are popularly credited with being able to prove anything, and therefore nothing.

In the District Surgeon's reports printed at the end of this book it will be found, that, as in the reports of previous years, many District Surgeons have made forcible reference to the increasing prevalence of Tuberculosis in the the Districts under their supervision, and they emphasize the necessity for some concerted action being taken to prevent its further spread. In order to show how this question directly affects all portions of the Colony, I will quote from such reports selected to show the state of widely separated districts of the country.

At Stellenbosch, the District Surgeon reports the fact that "Tuberculosis, although almost limited to the Coloured community, is making serious increase. This is a matter in which the co-operation of the whole of South Africa will be required for successfully eradicating this insidious disease. The fact that the Coloured community live closely together, also that they cannot be taught the rudiments of care in the matter of infection and contagion, and that at times they prefer poor living to work, would tend to make intelligent co-operation on their part very hard to obtain in any measures which may be framed for the stamping out of the disease."

Further afield, the District Surgeon, Wellington, in discussing the mortality occurring in his district, states, "The remarkable fact about these figures is the great increase in Tuberculosis."

Up in Carnarvon, the District Surgeon writes, "Tuberculosis is on an increasing scale; it formed 5 per cent. of all deaths in 1903, 10 per cent. in 1904, and 15·4 per cent. in 1905."

In Kimberley, the Medical Officer to the Kimberley Board of Health states that, "Amongst the deaths due to Tubercular disease, the form affecting the lungs, commonly known as Consumption, accounted for no less than 245 deaths, as against 155 in the previous year, and 134 in 1903. These figures show that the disease is rapidly on the increase; this is especially the case among the Coloured population, who live under conditions highly favourable to its

spread and who are indifferent to personal precautionary measures against infection."

In Hay, the District Surgeon writes of the great prevalence of the disease in his district. He states that "of the deaths occurring in the district during the twelve months ended on the 30th June, 1906, 21·7 per cent. were due to Tuberculosis, and that if the truth were known in regard to the uncertified deaths, the proportion, especially among Natives, would be found to be even greater."

At Cradock, the District Surgeon reports that Phthisis amongst the Natives is more prevalent of late years than formerly.

At Stutterheim, the District Surgeon states "Phthisis is very prevalent in the Native section of the population, and is unquestionably the cause of the greater part of the high mortality rate. Unless the Native races are to seriously suffer, some steps must be taken to combat the ravages of this disease among them. The great spread of Phthisis may be due in part to the change of food and clothing, in association with immorality and inebriety, but I believe it to be the result of direct infection. The free use of one another's blankets, coupled with the pernicious habit of completely enveloping the head in them when sleeping, renders this spread easy."

At Stockenstrom, we are told by the District Surgeon that "the subject, Tuberculosis, requires immediate attention. During the years 1904 and 1905, over 30 per cent. of the deaths I have notified have been due to Tuberculosis, and while at present this is amongst the Coloured population, nothing is being done to prevent its spread among the White population. If some preventive measures are not adopted, I am of opinion that the whole of the Hottentot race in Stockenstrom will in a short time be wiped out."

Also the District Surgeon, Jansenville, reports that "Phthisis is largely on the increase."

At Port Elizabeth, the District Surgeon reports that "Tuberculosis continues to give rise to the greatest mortality, particularly in the case of the Coloured and Native population, the disease in this class being virulent and, generally speaking, rapidly fatal. I have not infrequently seen whole families decimated by it in the course of a few months. The benefits of the compulsory notification of the disease do not reach the Natives, as they appear to regard it as incurable and do not call in medical assistance until the patient is about to die. Intestinal and Pulmonary Tuberculosis are common, that of bone and joints comparatively rare."

In the purely Native district of Herschel, the District Surgeon reports, "I am glad to be able to report that so far Tubercular diseases have no very great hold upon the people of this District. Most of the cases are those of imported Phthisis which occur among Natives returning from the Mines. The disease is acquired at the Mines, generally Kimberley or Jagersfontein, and the boy feeling no longer fit for work returns home to die. The disease is exceedingly rapid in its action and invariably fatal. Among the bastards the disease is more frequent and may be considered endemic."

The District Surgeons of the Native Territories do not deal greatly with this subject, but the District Surgeon of Elliotdale, in the Transkei, reports "Tuberculosis in all its manifestations is increasing to an alarming extent. I believe it would be a good plan, as the Natives believe in almost anything printed, to

distribute among them pamphlets with instructions regarding the precautions to be observed by Consumptives."

And even up at Walfish Bay, the District Surgeon reports "Pulmonary Tuberculosis is unquestionably very rife amongst the Native population, but exact information as to its incidence and the mortality caused by it, is almost impossible to obtain, owing to the fact that the Natives themselves do not consult a medical man for the complaint, and continue to pursue their usual avocations until prostrated by the disease, when, as a rule, nothing more is heard of the case until his death, usually caused by Bronchitis or Pneumonia.

On a former page I have dealt with the prevalence of Tuberculosis in cattle and its possible influence in spreading the disease by means of milk and ill-cooked meat.

Suppressionary Measures.

On the 5th of May, 1904, the Government proclaimed Tuberculosis to be a notifiable disease under "The Public Health Amendment Act, 1897," and one to which all the provisions of that Act, as regards the prevention of the spread of infection, would apply. The effect of this has, so far, not been of very material benefit. The majority of medical men and Local Authorities seem, in spite of frequent informing, to be unaware that the disease is notifiable, while in those cases where the occurrence of the disease is notified, very little use appears to be made by the Local Authority of the information. The whole question is, of course, one of considerable difficulty, for Tuberculosis cannot be placed on the same footing as an ordinary acute infectious disease, and the measures suitable and reasonable for its control are not such as would be adopted in the case of such a disease. Moreover, owing to its protracted course it results that multiple notification of a single case often occurs together with frequent change of residence. To meet these difficulties, we are preparing a circular for the guidance of Local Authorities and others in dealing with the disease.

The Municipalities of Cape Town, Claremont and Grahamstown have adopted a regulation for preventing spitting on the pavement, and in public places, and the Cape Government Railway Department has also issued a stringent rule on the subject. It is doubtful, however, whether such regulations are of any practical effect, except perhaps so far as they tend to educate the public mind against this disgusting habit. It is but seldom that prosecutions are instituted under any of these regulations.

The arrest of the disease can only take place by combined public effort; Health Departments and Local Authorities can do a great deal, but compared with what is to be done by the people themselves it is as nothing, and the people can only be brought to do their share by education. In this direction I was at one time hopeful that much good would result from the formation of the *South African Association for the Prevention of Consumption*, but since that society changed its name, its aims and scope, making general public health and hygiene its main object, rather than working for the one simple goal, the suppression of Tuberculosis, it is doubtful whether the promise which it formerly gave is likely to be fulfilled. Yet I cannot too strongly state the need that exists for undertaking a public campaign against the disease.

*Leprosy.**The segregation of Lepers.*

In Annexure "D" to this Report will be found printed in Tables 1 and 2 information regarding the Lepers on the Leper Registers of each District of the Colony Proper, and of the Native Territories, during the years 1904 and 1905, together with the manner of their disposal.

From these it will be seen that, in the Colony Proper, the year 1904 began with 196 Lepers (113 males and 83 females) remaining on the Registers at the end of the preceding year 1903, and that during the year a further number of 124 Lepers (81 males and 43 females) were discovered and placed on the Registers, making a total of 320 Lepers, of whom 194 were males and 126 females, or, according to race, 35 were Europeans, the remainder being Coloured or Native. Of this number, 77 (55 males and 22 females) were sent to an Asylum, 14 (10 males and 4 females) died, 7 (6 males and 1 female) absconded, while in the case of 2 (1 male and 1 female) the disease was reported to have become arrested, and in two others, 1 male and 1 female, it was reported that on further examination they were found not to be Lepers. There were thus remaining in the several districts of the Colony Proper at the end of the year, 218 Lepers (121 males and 97 females) still to be dealt with; of whom 11 were Europeans and 207 Coloured.

During the succeeding year 1905, a further number of 133 (94 males and 39 females) were discovered and placed on the Registers, making a total dealt with during the year of 351 (215 males and 136 females); of whom 34 were Europeans and 317 Coloured. Of this number 102 (75 males and 27 females) were sent to Asylums, 10 (8 males and 2 females) died, 7 (6 males and 1 female) absconded, while in 1 female the disease was found to be in abeyance and in 1 male and 3 females the disease was proved not to have been Leprosy; leaving at the end of the year a balance of 227 Lepers (125 males and 102 females), of whom 13 were Europeans and 214 Coloured, still to be dealt with.

It will thus be seen that in the Colony Proper during these two years there have at all times been at large some 250 known Lepers.

In the Native Territories all the lepers dealt with were natives, the year 1904 commencing with 220 (131 males and 89 females) remaining over from the previous year, and 86 (49 males and 37 females) being added to the register during the year, making a total of 306 (180 males and 126 females) dealt with, of whom 61 (31 males and 30 females) were sent to asylum, 17 (13 males and 4 females) died and 6 (2 males and 4 females) absconded, leaving 222 (134 males and 88 females) on the register at the end of the year.

With this number the new year 1905 was begun, and during it a further number of 106 (67 males and 39 females) were added to the register, making a total of 328 (201 males and 127 females), of whom 91 (57 males and 34 females) were sent to asylum, 16 (13 males and 3 females) died, 9 (7 males and 2 females) absconded, while in the case of 3 males and 1 female the disease was found to be arrested, and 2 males and 1 female were found not to be suffering from Leprosy. There was thus again a balance of 205 (119 males and 86 females) still to be dealt with at the end of the year 1905. So that in the Native Territories also there is practically a standing balance of over 200 known Lepers at large in the several districts,

Lepers at Large.

Altogether there was at the end of 1905 a total of 432 known Lepers at large, of whom 13 were Europeans and 419 Coloured, consisting of 244 males and 188 females. It will also be noted that this balance is not diminished year by year, either in the case of Lepers in the Colony Proper or in the Native Territories, but rather tends to increase. The cause of this large number of unsegregated Lepers is the total inadequacy of the present asylum accommodation.

This number, large as it is, by no means represents the total number of lepers which are not under segregation, for so long as the accommodation is insufficient for the segregation of those Lepers we already know of, practically no effective steps are taken by the Government for the discovery of all existing cases, in as much as those automatically coming to light in ordinary ways are more than sufficient to fill up such vacancies as arise in the Asylums. It need hardly be pointed out that, under such a system as this, Leprosy is not likely to be stamped out in this Colony in the near future. The Leprosy Repression Act has now been in force for the last fifteen years, but, so far, no sensible diminution of the stream of Lepers annually coming to light has been made by its operations.

At the present time there cannot be less than a thousand lepers at large.

But I think it may be safely stated that had sufficient accommodation been provided from the first, so that all cases of Leprosy could have been actively sought out and at once brought under segregation, the disease at the present day would practically have been stamped out among the population at large. Indeed were it not that every Leper segregated is at least one focus of infection removed, the reflection would be justified as to whether it is altogether fair to those under confinement to enforce segregation in so imperfect a manner that its main purpose of entirely eradicating the disease in the Colony is frustrated.

Medical Examination of Lepers.

During the past two years, the system of medical examination of Lepers previous and subsequent to segregation, described in former reports, has been carried out so far as it depends upon the Medical Officer of Health.

Speaking generally, the checks provided under this system may be said to be very complete, involving, as they do, the provision in the first instance of certificates as to the nature of the disease from the District Surgeon and a Justice of the Peace, together with a statement by the Resident Magistrate of the district, and in the event of there being any doubt whatever raised, either by the reputed Leper or by the authorities, a second medical certificate is at this stage also obtained. The whole of these documents are then referred to the Medical Officer of Health for the Colony for scrutiny and, if necessary, for special enquiry and a bacteriological examination of material from the patient. Only in the event of the evidence thus obtained being considered sufficiently conclusive is a warrant issued by the Minister for the patient's segregation in an asylum, and thereafter he is still further subjected to examination by the Surgeon-in-Charge of the Old Somerset Hospital on his way to Robben Island, who, if he experiences any doubt regarding the

case, detains the Leper for further examination by a Medical Officer of this Office. Assuming, however, that the patient reaches Robben Island he is again examined and reported on by the Medical Officer of the Island, and, later on, if doubt should subsequently arise, or the disease appear to become arrested, or the patient himself desire it, he is subjected to an examination by the members of the Leprosy Commission, who visit the Island for the purpose.

Checks for Lunatics as compared with Lepers.

Nevertheless, in spite of all these checks, the possibility of persons who are not Lepers being segregated in an asylum, has been the subject of frequent public enquiry, and is often made the opportunity of complaints by the lepers themselves. It is, of course, very right that this matter should be most jealously regarded by the public, yet one feels constrained to compare the amount of attention given to the case of the Leper with the want of public concern as to the measures in operation in regard to the certification and confinement of lunatics in asylums.

In their case it is only necessary that two Medical Certificates shall be forthcoming regarding the mental condition of the patient, and in certain special cases only one need be obtained, in order to commit a person to an asylum, after which event the only check remaining between the person and his loss of liberty is the Certificate of the Medical Officer in charge of the asylum into which he is received. In this Colony, no Commissioners in Lunacy are appointed, charged with the duty of ensuring that all Lunatics are rightly under confinement and restraint. Yet, in comparison with a Leper, the Lunatic is in a much more unfortunate position, for the Leper is at least able to state his case with the voice of sanity, whereas even though a patient confined as a Lunatic be perfectly sane, any statement which he may make is always, *ipso facto*, liable to be looked upon with suspicion as being the ravings of a diseased mind.

That the possibilities above suggested are by no means visionary, I may say that it might happen, and indeed it has happened, that under the present system, a sane person might be sent to an asylum upon the single certificate of a Medical Practitioner, and on his arrival there be found sane by the Medical Officer in charge of the asylum, or that a case suffering, say, with the delirium of Enteric Fever be sent to an asylum on a medical certificate founded on the belief that the acute delirium, symptomatic of the fever, was the result of distinct mental disease. Even though such patients may be shortly afterwards discharged, the stigma still attaches to them of having been confined in a lunatic asylum.

Nor can Lepers like Lunatics be confined for many months in our Gaols before being sent to a proper Asylum. Nor can they be confined in private institutions as "Single Patients," in one of which I recently found seven patients suffering from the following diseases:—One chronic mania, one senile dementia, one epilepsy, three chronic alcoholism, and one awaiting confinement.

In drawing attention to this difference in the safeguards exercised in the case of the Leper and of the Lunatic, I need hardly say that, owing to the skill and circumspection exercised by the Inspector of Asylums and the Asylum Medical Officers under his jurisdiction, the deficiencies of the Law have been rectified in practice, but this fact does not nullify the argument I have employed.

Discharges from Leper Asylums.

In addition to the duty devolving upon the Medical Officer of Health of reporting on the medical certificates of Lepers proposed for segregation under the provisions of the Leprosy Repression Act, he has also performed the special duty of Chairman of the standing Leprosy Commission charged with the work of periodical examination of Lepers already confined in Asylums, for the purpose of deciding in regard to any cases concerning which, doubt as to the disease being Leprosy may have arisen, or as to the disease having become arrested. The other members of the Commission, which as at present constituted consists of three, have, from time to time, been Dr. Mitchell, the Assistant Medical Officer of Health for the Colony; Dr. Robertson, Bacteriological Assistant in this Office; Dr. Cox, the Surgeon-in-Charge of the Old Somerset Hospital; Dr. Chute, District Surgeon of King William's Town; and Dr. P. H. Walker, District Surgeon of Mquanduli. On those occasions when, owing to the demands of other work, the Medical Officer of Health is not able to be present, he is empowered to appoint an officer to act as his deputy.

In the course of this work, numerous bacteriological examinations have had to be carried out, and these have been performed by Dr. Robertson.

During the years 1904 and 1905 the Commission has, as a result of these examinations, recommended the following cases for discharge :—

1904, from Emjanyana, twenty arrested and one non-leprous ;

1904, from Robben Island, four arrested.

1905, from Emjanyana, four arrested and one non-leprous ;

1905, from Robben Island, two arrested.

There were also four inmates discharged from Emjanyana in 1904, and one in 1905, on the report of the Resident Medical Officer alone.

During the past ten years, ended on the 31st December, 1905, the following releases of Lepers from Robben Island and Emjanyana Asylums, respectively, have taken place in each year. It is to be noted that the Commission under the Medical Officer of Health for the Colony sat for the first time in the case of Robben Island in 1900, and of Emjanyana in 1902.

ROBBEN ISLAND.						EMJANYANA.				
Year.	For Home Segregation.	Disease Apparently Arrested.	Not Leprous.	Doubtful.	Total.	For Home Segregation.	Disease Apparently Arrested.	Not Leprous.	Doubtful.	Total.
1896	1	0	0	0	1	0	0	0	0	0
1897	0	0	0	1	1	0	1	1	0	2
1898	2	0	0	0	2	0	2	2	20	24
1899	3	0	0	1	4	0	0	1	0	1
1900	1	13	1	1	16	0	0	0	1	1
1901	0	3	1	3	7	0	8	0	3	11
1902	0	7	0	4	11	0	9	2	1	12
1903	0	1	2	0	3	0	0	0	1	1
1904	0	4	0	0	4	0	22	2	1	25
1905	0	2	0	0	2	0	4	2	0	6
Total	7	30	4	10	51	Nil	46	10	27	83

So far, the following actual relapses among such discharged Lepers have come to our knowledge, but there is no doubt that a considerable number of other cases have relapsed since leaving the Asylum, but the fact has not been reported. The known number, although only amounting to five, is yet a considerable proportion of the number discharged and indicates the care which must be taken before any Leper is removed from the operation of the Leprosy Repression Act.

TABLE showing known cases of Relapse in Lepers Discharged as Arrested.

Name.	Grounds for Release.	Date of Release.	Date of Relapse.
Johannes Kent ...	Arrested	9.5.02	28.7.05
Quileza ...	Arrested	3.12.02	29.6.05
Isaac Visagie ...	Arrested	24.8.04	28.7.05
Nomatshaka Pambani	Arrested	11.6.02	16.5.06
Lehtyisi Camagu ...	Arrested	22.12.05	21.6.06

In dealing with the release of Lepers from segregation, one great difficulty consists in deciding as to whether the disease is actually arrested, that is, self-cured, or whether it is simply undergoing one of those periods of apparent quiescence not uncommon to the disease. This difficulty results from the prolonged course and slow manifestations of the disease under ordinary circumstances, so that what may appear to be an arrested or cured case is really nothing more than a pause in active manifestations of greater or lesser duration, the disease, however, persisting during the interval. Unfortunately, we possess no means, other than the observation of the active manifestations or symptoms displayed by the patient, of ascertaining whether the disease is active and whether it is in an infective condition. For although we know that the disease is contagious and is undoubtedly caused by the invasion of the body by an organism, beyond these limited facts we possess little further knowledge. In what way it is contagious and is spread we do not know. The disease cannot be reproduced by inoculation into animals, and the *Bacillus Lepra* is, so far as experiments go, incapable of cultivation. Moreover, there are no means by which we can ascertain when the bacillus is alive or dead. We know that the organism is found in Tubercular nodules and ulcers and we know that it leaves the body frequently through the discharges from the nose, in the mucous surface of which leprous ulcers exist, but beyond these facts we have no data on which to build. It is, therefore, not surprising that the question as to whether a particular case is cured or not is one of the greatest difficulty to decide, and that, on the one hand, cases incorrectly believed to be cured have been discharged, or, on the other, cases which could be discharged may have been kept under segregation.

It is probable that Anaesthetic Leprosy is ordinarily far less contagious, and therefore less dangerous to the public, than is the Tubercular variety, but to what extent the danger is less and under what conditions it may be taken as being slight, we have no means of judging.

Dr. Armauer Hansen's Views.

Feeling the importance of this question, and recognising the great responsibility that devolves upon me and others in deciding the destiny of Lepers brought under our observation for examination and report, I sometime ago entered into communication on the subject with Dr. Armauer Hansen, the great and famous Norwegian authority on the treatment of Leprosy and the discoverer of the Leprosy Bacillus, and this gentleman was good enough to furnish me with his views, which are of such interest that I venture, after having obtained his permission, to transcribe them here. He says:—

“I have no doubt of the utility of the segregation of Lepers. I say, as I said at the Berlin Conference in 1897, that we may fight each other as much as we like as to etiology of Leprosy, but the results of the isolation of Lepers prove clearly what we have to do in order to check the spread of the disease. In my opinion, there can hardly be any doubt as to the contagiousness of Leprosy, though we cannot prove it yet with full scientific evidence. As you know, our kinship with the apes becomes more and more evident. The hamolysives and precipitives which dissolve the human red corpuscles and produce precipitates in human serum, have the same influence on the blood corpuscles and serum of apes. Syphilis, which is a specific human disease, has now been transferred to apes, the *Macacus Sinicus* and the Chimpanzee. Unhappily we cannot keep these alive here in Norway, that is to say, not without exceedingly large expenditure, and so we have not had the opportunity to try the experiment of transmitting Leprosy to them, Leprosy being also a specific human disease. But Dr. Nicolle in Tunis seems to have succeeded in transmitting Leprosy to the *Macacus Sinicus*, and Dr. Nicolle being an able experimenter, it is, in my opinion, probable that he is right, and that in the future we shall have the fact proved to a certainty by the inoculation of other apes from the first one affected. But as already mentioned, even if the experiment of Dr. Nicolle is a failure, the results of the segregation of Lepers is no failure, and although Hutchinson says that Leprosy has decreased in Norway because the Norwegians have learned to prepare their fish better than before, this is directly disproved by the fact that Leprosy was decreasing in Norway before there was any bettering in the preparation of fish-food. For in 1871 and 1872 our peasants still consumed much ill-prepared fish-food, as I myself have seen, yet at that time Leprosy was already decreasing in Norway as a consequence of isolation. It is, indeed, only during the last ten or fifteen years that our rural population has improved their preparation of fish diet. We have here in Norway just the same difficulty which you mention, that the Lepers themselves will not believe that there is any danger in their free intercourse with other people. But by always preaching to the sound people that they must take care and beware of too free intercourse, I and my colleagues here have arrived at the point that now almost all have fear of the Lepers; and this is what is needed; when the sound people take care and avoid free intercourse with Lepers, there will be much fewer occasions for transmitting the disease.

“ I, for my part, regard eight to ten years old Anæsthetic patients as almost harmless. But Dr. Lie, a young Doctor at our Asylum, has found bacilli in the spinal cord and in the ganglia of such patients, so that they cannot be said to be cured as I formerly contended to be the case. But, nevertheless, we do not know if these bacilli are still living, or if the bacilli are so well sheltered up that they can be transferred to other people, and, consequently, while I insist very strongly on the isolation of Tubercular patients, I am much more lenient as to the isolation of Anæsthetic ones. But I never tell this openly to the patients or their friends, for if I did so they would apply my words to cases to which they would not fit.

“ I must confess that I cannot give you a completely reassuring reply as to how you are to distinguish between an arrested and no longer infective case, and one which is not arrested and, in consequence, still infective. I can only say that I regard Anæsthetic cases of Leprosy which are older than ten years as innocent, but I cannot swear that they are so, but most of them will be, although as I have said Dr. Lie has found bacilli in the nerves and spinal cord of much older ones, but these bacilli are so well and deeply deposited that they can hardly do any harm. I never found bacilli in the secretion of their ulcerations, but this might perhaps have happened if I had sought for them in more cases than I have done, for Dr. Lie found bacilli in an old Anæsthetic patient in an ulcerated cornea, so you see there remains a degree of uncertainty in this matter, but as a rule I think that from a clinical point of view we may regard the greatest part of the Anæsthetic patients as being unable to prolong the disease.

“ After my experience one can very well make the population afraid of Lepers, at least here in Norway. This fear does not lead to any cruel treatment of the patients, it only causes more circumspection.”

In considering these views of Dr. Hansen, it is to be borne in mind that, in Norway, the people, and the conditions under which the people live, are very different from what obtain in this Colony with its large coloured and ignorant population, and that, whereas segregation here must be matter of compulsion, segregation in Norway is an act voluntarily undertaken by the people as a whole, who are keenly alive to the necessity of this measure and the benefits which have resulted to the nation thereby in stamping out the disease. I need scarcely add that, in dealing with Lepers in this Colony, and in deciding as to their future, every consideration is given to the form in which the disease exists and to the stage which it has reached in the patient.

Treatment of Lepers.

No advance has so far been made in the treatment of Leprosy. Chaulmoogra Oil is extensively used for the purpose at both Government Asylums, and while it cannot be considered a specific in the treatment of the complaint, it nevertheless often appears to produce considerable improvement, especially in Tubercular cases. This improvement is not always maintained when the use of the drug is discontinued.

On seeing accounts of the alleged effectiveness of a curative preparation devised by Captain Röst of the Indian Medical Service, and named by him "Leprolin," the Government cabled to the Indian Government for information as to its value, and received the reply that Captain Röst had not succeeded in cultivating the bacillus of Leprosy, and that the Government of India had ordered the discontinuance of the use of "Leprolin" in that country.

Steps are being taken to instal a Finsen Light apparatus at the Old Somerset Hospital, where, as soon as the work is completed, its curative effect will be tested on some suitable cases brought over from Robben Island for the purpose. The apparatus cannot be used on the Island as the necessary electric power does not exist there.

It is also intended to test the value of the "X" or Röntgen Ray, as also of Radium, in the treatment of the disease. All of the abovementioned apparatus, together with a supply of Radium, have already been imported. I cannot, however, predict much success from such treatment.

It may be mentioned that no obstacle is placed in the way of any Leper in the Asylum submitting himself to any form of treatment alleged to effect, or offering a prospect of, a cure.

Leprosy Research.

The question of the carrying out of Research work into Leprosy has also engaged the attention of Government, but so far no progress has been made. On two occasions in the past, Bacteriologists have been imported by the Government for the special purpose of undertaking this work on the Island, but nothing resulted from either appointment and the experiment in that form was discontinued.

Recently, however, the Government approached, through the High Commissioner, the other South African Colonies, with the view to ascertaining whether it would not be possible to arrange for the establishment of a Joint Research into the disease, to be carried out under the auspices of the several Colonies, by competent Scientists in some properly situated and equipped Laboratory. But the replies elicited were adverse to the proposal. The Government of Natal declared itself to be not at present able to take part in any such scheme. The Transvaal Government, while recognising the importance of co-ordinating the work which is being done in South Africa in connection with Leprosy, and of having the fullest opportunity for exchange of information and results, doubted whether it would be possible to establish a Central Laboratory, and was of opinion that such work should be carried on where the Lepers themselves are located. The Government of the Orange River Colony declared its unwillingness to contribute towards Research of the nature contemplated; that the mortality from Leprosy in the Colony was slight and chiefly confined to the Native population, white persons being rarely affected, only one case of a European contracting Leprosy being reported during the last five years, and it was expected that Leprosy would be still further diminished through the operation of a Public Health Ordinance which was contemplated. Moreover, it was considered that such Research work could be better carried on outside South Africa, in Europe and India.

The Administration of Rhodesia, while fully sympathising, regretted that it was not at present financially prepared to participate in the scheme.

Syphilis.

This disease is dealt with under the provisions of "The Contagious Diseases Prevention Act, 1885," Part I of which deals with the prevention and cure of the disease in Prostitutes, and Part II with the treatment of the disease among the population generally.

Working of Part I of the Act.

During the years 1904 and 1905, this portion of the Act has continued to be worked in the districts in which it applies by statute or has been proclaimed, namely, in those of Cape Town, Wynberg, Simon's Town, Port Elizabeth, Uitenhage, East London, King William's Town, and, since the 29th of March, 1904, in Umtata; the selection of these places depending on the circumstance that they are either Ports or are places used as Naval or Military centres, the latter being the reason for its recent promulgation in the town of Umtata. This portion of the Act has not been proclaimed in Middelburg, although this is a Military centre.

The Act should, in my opinion, unquestionably be applied to the district of Kimberley, if not also to certain other places frequented by large numbers of adult unmarried Natives. In the case of Kimberley, the large number of Native prostitutes who are affected is causing a considerable amount of disease among Natives from the Native districts seeking employment on the Mines, and these, when they return to their kraals in the Territories, are said to be spreading the disease extensively. If any proof of the necessity for the promulgation of the Act in this District is required, it is only necessary to consult the records of Syphilitic paupers under treatment from year to year in the Kimberley Hospital at the expense of the Government. These numbered in 1903, 212, in 1904, 192, and in 1905, 196, fresh cases.

Antagonistic effect of the "Morality Act."

As already pointed out in previous Annual Reports, the working of this portion of the Act has been materially crippled by the operation of the Act No. 36 of 1902 ("The Betting Houses, Gaming Houses and Brothels Suppression Act, 1902," but commonly known as the Morality Act), which was promulgated on the 1st December, 1902. Immediately upon this being done, there was a drop in the number of prostitutes attending for periodical examination at all the Stations, but more especially in Cape Town, due to the fear which these women entertained that the fact of their being on the Register of Prostitutes might lay them open to prosecution, and that, in any case, the information which they furnished under the Contagious Diseases Prevention Act might be used by the police in their operations under the Morality Act.

How serious has been this fall is demonstrated by the subjoined Table, which gives statistics of the working of the Act separately for Cape Town, and collectively for all other Districts, together with the total for all Districts (excluding, of course, the District of Umtata, where the Act was not in force

prior to the coming into operation of the Morality Act), for each of the three years prior to 1902, and each of the three years subsequent to that year—in all, for a period of seven years. The information concerns the number of women on the Register, the total number of women examined, distinguishing between European and Coloured, and the number of women found diseased, and the proportion which the latter bore to the number of women under examination.

	CAPE TOWN.							OTHER DISTRICTS.							ALL DISTRICTS.						
	1899	1900	1901	1902	1903	1904	1905	1899	1900	1901	1902	1903	1904	1905	1899	1900	1901	1902	1903	1904	1905
No. of women remaining on the Register on the 31st December of previous year	280	174	249	229	188	49	46	205	221	271	259	249	216	173	485	395	520	488	437	265	219
No. of women placed on Register during the year	174	234	279	246	50	69	72	80	134	130	75	52	41	43	254	368	409	321	102	110	115
No. of women removed from the Register during the year	280	159	299	287	189	72	47	64	84	142	85	85	84	37	344	243	441	372	274	156	84
Total number of women examined	454	408	528	475	238	118	118	285	355	401	334	274	238	203	739	763	929	809	512	356	321
European	260	208	282	244	87	60	18	58	90	88	64	29	24	11	318	298	370	308	116	84	29
Coloured	194	200	246	231	151	58	100	227	265	313	270	245	214	192	421	465	559	501	396	272	292
No. of women found diseased	139	129	180	96	31	30	40	116	148	154	137	115	75	72	255	277	334	233	146	105	112
Proportion of individuals found to be diseased per centum of women examined	30·6	31·6	34·1	20·2	13·0	25·4	33·8	40·7	41·7	38·4	41·0	42·0	31·5	35·5	34·5	36·3	36·0	28·8	28·5	29·5	34·9

NOTE.—Part I. of the C.D.P. Act 1885, came into force in the district of Umtata on the 29th March 1904. The figures for this centre are not included in the above table.
Act No. 36 of 1902 (Betting Houses, Gaming Houses and Brothels Suppression Act) was promulgated on the 1st December, 1902.

From this Table it will be seen that in Cape Town, the number of women under examination dropped from 528 in 1901, and 475 in 1902, to 238 in 1903, falling still further in the two subsequent years to 118. This decrease was greatest among the European prostitutes, who, in 1901, numbered 282 ; in 1902, 244 ; in 1903, 87 ; in 1904, 60, and in 1905, only 18. While the Coloured prostitutes who, in 1901, numbered 246, in 1905 still amounted to 100. Also the number of women found to be diseased proportionately diminished : in 1901, 180 were so found, while in 1905 there were only 40. The proportion of women found diseased as compared with the number under examination has not very materially altered, having been 34·1 in 1901 and 33·8 in 1905.

If we turn to the other districts, the same diminution, although perhaps not in such a high degree, has taken place since the introduction of the Morality Act.

Some of this decrease may be due to the reduction of the military after the war, and some to the increased exclusion of foreign women, by the operation of the “Immigration Act,” but making every allowance for these factors, there is no doubt but that the reduction was almost entirely due to the application of the Morality Act, as is proved by the fact that, in November, 1905, the Government decided to cease an active crusade against Brothels under that Act, with the immediate effect that women in Cape Town began to return for medical examination under the Contagious Diseases Prevention Act, so that during the first half of the year 1906, 96 new cases have been already placed upon the Register, as compared with only 72 new cases registered during the whole of the year 1905.

In my opinion, if any new legislation is framed in the future for dealing with this subject, means should be adopted to bring into some accord the present conflicting laws, more especially in the direction of exempting women registered under the provisions of the Contagious Diseases Prevention Act, being, by reason of registration, rendered liable to proceedings under the Act 36 of 1902, and of making all information obtained under the former Act confidential and preventing it being used for any purposes connected with the Morality Act.

With regard to the general working of this portion of the Act during the two years under review, information on this subject will be found in the Annual Reports furnished by the several Medical Inspectors and printed on pages 276 to 285 of this volume. It will be seen that the Act, with the exception above dealt with, has worked smoothly, and there can be no doubt that, even in its now very partial operation, it still remains of great benefit to the community in preventing the spread of infection.

Cost of working Part I of the Act.

The total cost of working this portion of the Act was, in 1905, £3,211 4s. 6d.; a decrease in the cost as compared with 1904, when it was £3,774 14s. 10d., which again was a decrease on the previous year, 1903, when it was £4,075 14s. 10d. The whole of this saving was due to reductions in the emoluments of the Medical Inspectors in the districts of Cape Town, Simon's Town and Port Elizabeth, and to the closure of the Simon's Town Contagious Diseases Hospital and the sending of women found diseased in that place into Cape Town for treatment in the Lock Hospital there.

In Table 7, Annexure "E," will be found full detailed information as to the expenditure incurred in the working of this portion of the Act.

Working of Part II of the Act.

By far the most important portion of the Act is that known as Part II, which applies to the entire Colony and deals with Syphilis on the basis of it being a non-venereal disease, as in this Colony it very largely is.

In Tables 1 to 3 of Annexure "E" to this Report, will be found full details regarding the operation of this portion of the Act during the two years, 1904 and 1905. From these it will be seen that the total number of patients under treatment during 1904 was 2,248, of whom 102 were Europeans, (64 males and 38 females), and 2,146 Coloured, (1,006 males and 1,140 females), and in 1905, the total number was 2,290; 109 being Europeans, (68 males and 41 females) and 2,181 Coloured, (970 males and 1,211 females).

Of these numbers, the whole were suffering from Syphilis in its different stages, with the exception of 126 in 1904 and 108 in 1905, who were suffering from other manifestations of Venereal disease. It is evident from these figures that this portion of the Act is really a measure for the prevention of the spread of Syphilis and not of Venereal disease in the common acceptance of the term.

The particular stage of the disease in the cases under treatment, is shewn in the following return :—

	1904	1905
Primary ...	99	98
Secondary ...	409	456
Tertiary ...	1074	1106
Hereditary ...	522	522

Thus nearly all the patients under treatment were in the late Tertiary stage, or were suffering from manifestations of the so called Hereditary form of the disease, which may be taken as also being chiefly late Secondary and Tertiary forms. The importance of these figures lies in the circumstance that the majority of such cases are only mildly infective and that many are probably not infective at all, and, therefore, by their medical treatment we are doing little to prevent the spread of the disease to others, although much to save the patient from the terrible and almost sure effects of the complaint when it is left untreated. But as all these cases must have had a period when they were in the Primary and Secondary stages, and were then highly infective to others, and as the number of cases in these stages has never at any time been many, it is evident that the disease under our present measures is not being dealt with or controlled during the period of its greatest infectiveness. The reason of this is that the class of patients affected do not pay much heed to the comparatively mild symptoms of the disease in its early stages, and therefore, do not seek, or, if seeking, will not remain under medical treatment, and there appears to be no practical way in which such cases can be brought and kept under treatment, except by educating the masses of the people to a recognition of the complaint in its earlier stages and to the importance of persons suffering from them at once placing themselves under proper and continuous medical care. This result, however, is not likely to be attained in the near future, having regard to the class of persons we have to deal with. From time to time the Government has issued Circulars in English, Dutch and Kaffir, detailing the symptoms of the disease and impressing on farmers, employers of labour, and the public generally, the importance of treatment and the adoption of means to prevent infection ; but it must be confessed that no obvious benefit has so far resulted from the diffusion of such information.

The most effective means of checking the disease would be if farmers and employers of labour kept watch for symptoms among their servants, and on the discovery of any suspicious circumstances they gave information to, or insisted upon such servants being examined by, the District Surgeon of the district. By this means there is no doubt that many early cases at present not under treatment would be discovered.

Prevalence and Spread of Syphilis.

It is certain that, under present conditions, the disease is spreading extensively in the Colony, and in some districts to a very alarming degree. In Bechuanaland, the extent to which the population is affected is extraordinary, and by some observers is fixed in certain districts at figures which are scarcely credible. As a consequence of such reports, Dr. Thornton, a Medical Officer of

this Office, recently made enquiry into the state of things on the spot, and reported that "from the testimony of the various officials of Mafeking and Vryburg, and from enquiries amongst the Natives, it would seem probable that it is very prevalent, and threatens to endanger the very existence of the inhabitants of these areas." He endeavoured to obtain statistics in regard to several of the kraals, but found it impossible to get even approximate figures. The disease appears to be in almost every kraal of any size, and in some almost every other person is said to be affected. In any case, it probably would not be too wide of the mark to say that, in the two districts, one in every ten persons is affected, and it would seem almost certain that the number of infected persons is increasing daily."

In the District of Taungs, the extent of the infection is even greater, and in the district of Gordonia it has been reported to affect some 70 or 80 per cent. of the Bastard population.

In the reports of the District Surgeons printed hereafter will be found many references to the prevalence of this disease, and to the need for something being done to check its increasing ravages.

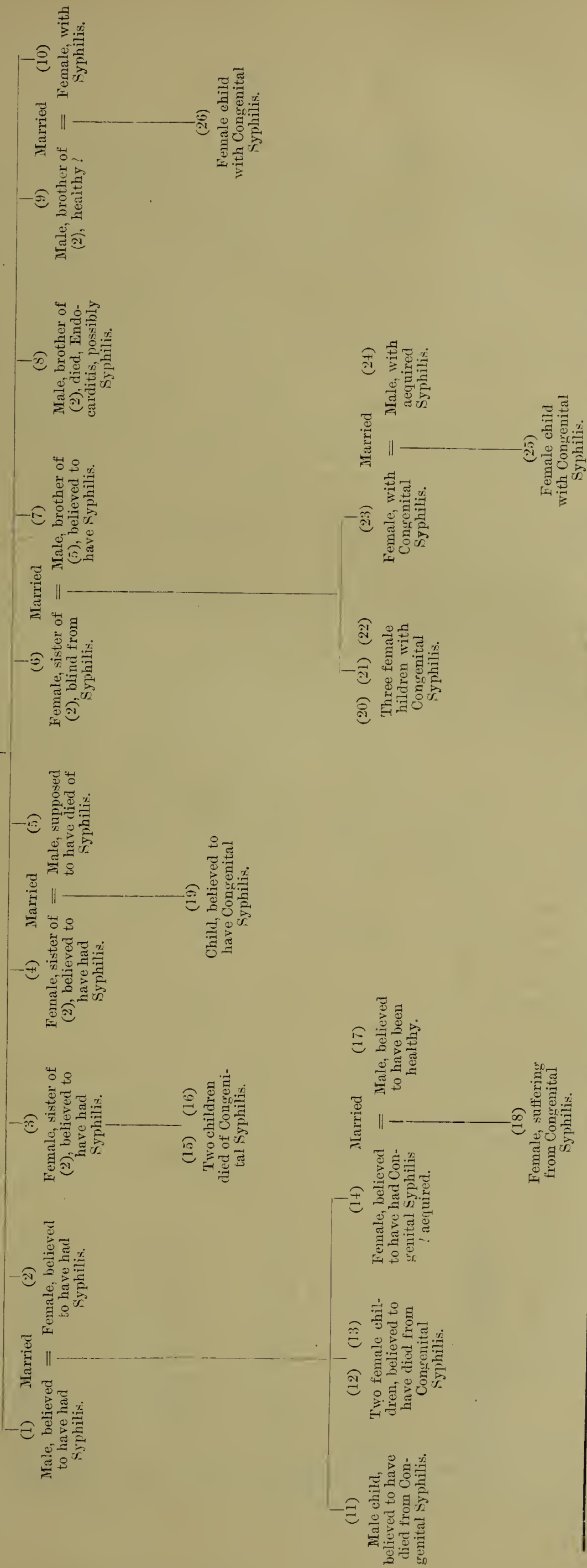
Example of its spread in Hopefield.

How widely the disease may be spread among a community untreated and taking no precautions is well illustrated by a special report furnished by Dr. Rossiter, the Additional District Surgeon at Hopefield, regarding a large group of Syphilitics whom he was called upon to treat as District Surgeon at the Government expense.

He states that the Sub-district of Hopefield appears to have been fairly free from Syphilis until the year 1887, when a Coloured woman suffering from the disease, together with her daughter who had congenital Syphilis, came to reside in the district in a Coloured family living at St. Helena Bay. In due course nearly every member in this family with whom she lived contracted the disease, together with a large number of other associates in the district. In the sub-joined Table it has been attempted to show in a diagrammatic form the known results of this woman's visit. It will be noticed that the disease spread to twenty-six persons, attacking the second generation, and even to members of the third generation. In addition to this family, the original female is believed to have been the cause of the infection of at least ten other persons in the district, who handed on the disease to sixteen of their children. At the present time this area is badly infected with Syphilis, and there appears to be but little doubt, from Dr. Rossiter's careful investigations, that the original introduction of the disease was due to the abovementioned infective woman. I may add that many of the cases have suffered horrible deformities.

TABLE showing the results of a Coloured woman, suffering from acquired Syphilis, with her daughter who had Congenital Syphilis, coming to live in a family of Coloured persons residing at St. Helena Bay, Malmesbury District, in 1887, which place, prior to that year, is stated to have been free from this disease.

THE ORIGINAL INFECTIVE WOMAN.



NOTE.—The original Female is also believed to have been the cause of the infection of at least ten other persons in the District, who handed on the disease to sixteen of their children. Case (10) belonged to one of these infected families.

Danger of spread to Europeans.

This matter is not only of importance to the Coloured population, but directly affects Europeans, as many instances are reported by District Surgeons and others of infection being spread by Native servants to their European employers, generally to children by their Native nurses. Dr. Thornton heard of two such cases in the course of his enquiry in Bechuanaland. Also, the Medical Officer to the Municipality of Cradock, writing to me under date the 25th February, 1906, says "I have quite lately discovered several cases of Coloured persons shewing typical Secondary symptoms, who resided in the house of their employers, acting as nurse or in some other domestic service which brought them into constant close contact with the children and their parent. I have not the slightest doubt in my mind that Syphilis is markedly on the increase and isolation appears to me to be the only possible treatment for Natives; that is, looking at it from the point of view of eradication or even partially stamping out, and not simply to the individual's treatment."

And the District Surgeon of Ladismith reports that in the course of his practice he has come across White families where the mothers and children have been affected by Coloured servants.

The District Surgeon of Laingsburg also draws attention to the same danger, as, too, does the District Surgeon of Oudtshoorn, who says "there can be no question but that the disease is spreading among the Whites, and this is due entirely to their own carelessness as regards the condition of their servants. The disease in its primary form is seldom met and the spread is not due to immorality, but to the children being contaminated by the servants."

The following Table shews the number of pauper cases under treatment during the past ten years, from which it will be noticed that a steady increase has been taking place year by year. A considerable amount of this increase is due to the larger number of cases coming under treatment in Bechuanaland, but this does not account for the whole. These figures must only be taken as the merest approximation to what is actually the case, as, with few exceptions, they are, as already remarked, only those cases presenting the gross lesions of the disease, due to ulceration and loss of tissue, and of course they only relate to paupers who cannot afford to pay for medical treatment.

TABLE showing the number of Pauper cases of Syphilis under treatment in the Colony during each Year, 1896 to 1905 :—

Year.	European.	Coloured.	All Races.
1896	101	1,437	1,538
1897	133	1,654	1,787
1898	133	2,006	2,139
1899	111	1,366	1,477
1900	123	1,545	1,668
1901	89	1,459	1,548
1902	77	1,620	1,697
1903	71	1,829	1,900
1904	82	2,022	2,104
1905	101	2,081	2,182

Note that during the years 1899, 1900 and 1901, returns from some few districts were unobtainable, owing to the effects of the war.

Of the patients treated in the Colony Proper during 1904, 919 were treated in Hospital and 1,329 as Out-patients. Of the Hospital cases, 585 were reported to have been cured, 48 to have died, and 78 to have left the Hospital and lapsed from treatment. Of the out-door patients, 239 were reported to have been cured, 37 to have died, and 431 to have lapsed from treatment. In 1905, 617 were treated in Hospital, and 1,673 as out-door patients, and of the former 375 were reported to have been cured, 26 to have died, and 51 to have lapsed from treatment; while of the out-door patients 359 were reported to have been cured, 42 to have died and 553 to have lapsed from treatment uncured.

These figures with the large proportion of lapses from treatment, serve to demonstrate the necessity, testified to again and again by District Surgeons, if treatment is to be effective, of getting the patients into Hospital and keeping them there.

At the present time, Hospitals exist in only a limited number of districts, inasmuch as on the 5th October, 1904, Circular instructions were issued by the Government, closing the larger number of the then existing Contagious Diseases Hospitals or Lazarettos in the different districts of the Colony. It is doubtful if this was a good decision, but the grounds on which it was arrived at were perhaps sound, namely, that the class of patient chiefly treated in such Hospitals was the late Tertiary, who was no longer a danger to the community; that the Hospitals themselves were in a wretched condition, incapable of satisfactory administration, and that the expense entailed on the Public Treasury was not commensurate with the results obtained.

In my opinion, it is desirable that a number of properly equipped and centrally placed Contagious Diseases Hospitals should be established throughout the Colony, into which cases requiring isolation as well as treatment should be drafted from the surrounding districts. But for such a system to work it would be necessary that the Act provide better powers in order to compel the sojourn in hospital of syphilitics who are now free to remain at large, spreading the disease.

Cost of Administering Part II. of the Act.

The cost of carrying out the provisions of Part II. of the Contagious Diseases Prevention Act amounted, in 1904, to a total sum of £12,067 6s., and in 1905 to a total of £8,990 12s. 9d. The main cause of this diminution was the closure of the local lazarettos above-mentioned, which reduced the cost of provisions and supplies from £4,587 3s. 10d. in 1904 to £2,076 11s. 2d. in 1905, and the cost of salaries and allowances to nurses and attendants, from £1,130 10s. 5d. in 1904 to £527 9s. 6d. in 1905. The other main items composing this expenditure consisted of, in 1904, a sum of £3,405 6s. 1d., being fees to District Surgeons for medical attendance and medicine, and of £2,193 0s. 6d., mainly paid to the Kimberley Hospital for the treatment of pauper syphilitics; while in 1905 these payments to District Surgeons amounted to £3,362 16s. 2d., and to hospitals for the treatment of pauper syphilitics, £2,486 9s. 6d., £2,393 18s. 6d. of which was paid to the Kimberley Hospital.

The expenditure in the Native Territories was extremely slight, the disease there practically not being under medical supervision. In 1904 it amounted to £79 12s. 1d. and in 1905 to £63 12s. 11d.

I may mention that the payments to the District Surgeons are based on a tariff rate of 7s. 6d. per patient per month, the District Surgeon finding all medicines, other than the expensive drug, Iodide of Potassium, which in these cases has to be administered in large quantities, and is therefore provided free of cost by the Government.

5. CANCER.

During recent years the question of the prevalence of Cancer has been engaging the attention of medical men and the public in many parts of the world, and notably in England, where a special enquiry is in progress under the auspices of what is known as "The Cancer Research Fund," which receives the patronage of the King and is being officially supported by the British Government. This organisation is gathering systematic information in all British Colonies, and in pursuance of this scheme the Colonial Government has, among others, been approached by the English Colonial Office with the view to our rendering assistance in the enquiry. This assistance has been promised by the Colonial Government, and steps have been taken to enlist the interest and assistance of the Colonial Medical Council, the various Branches of the British Medical Association and of all Hospital administrations in the Colony; and in order to co-ordinate and concentrate the work so far as this country is concerned, the Medical Officer of Health for the Colony has been appointed by the Fund, with the agreement of the Government, the Local Agent for the Cape.

Long prior to this, however, I had been struck with the apparent prevalence of Cancer in the Colony, but no confirmation could be obtained, as the available statistics on the subject are somewhat meagre and are by no means reliable.

TABLE showing annual number of Deaths and the rate of mortality from "Cancer" in the Chief Towns of the Colony during the Years 1896 to 1904.

YEAR.	EUROPEAN.		COLOURED.		ALL RACES.	
	No. of Deaths.	Death Rate per 1,000.	No. of Deaths.	Death Rate per 1,000.	No. of Deaths.	Death Rate per 1,000.
1896	100	0·75	55	0·41	155	0·58
1897	93	0·69	58	0·41	151	0·55
1898	95	0·68	41	0·28	136	0·48
1900	131	0·70	76	0·47	207	0·59
1901	116	0·58	72	0·42	188	0·51
1902	156	0·75	68	0·38	224	0·58
1903	137	0·62	58	0·31	195	0·48
1904	130	0·54	76	0·37	206	0·47

NOTE.—Statistics for the year 1899 are not available, owing to the records having been destroyed by fire.

The deaths for the years 1896 to 1898 are given for 32 Chief Towns in the Colony, those for the years 1900 to 1903 for 35 Chief Towns, and those for 1904 for 40 Chief Towns.

In the above Table I give the annual mortality per thousand from "Cancer" of the total population of Europeans and of Coloured in the chief towns of the Colony for each of the years

from 1896 to 1904, except that no complete statistics are available for the year 1899, owing to a fire having destroyed the records of the Registrar-General for that year. Nor are any statistics obtainable prior to 1896. From this Table it will be seen that the annual death rate at all ages and for both sexes, due to this disease, ranges, for Europeans, between 0·75 and 0·54 per thousand of the estimated population ; for Coloured, between 0·47 and 0·28, and for all races combined, between 0·59 and 0·47.

In England and Wales, the recorded mortality from Cancer has been steadily increasing, and amounted, for all ages and both sexes, in the decennium 1861-70, to 0·38 per thousand ; in the decennium 1871-80, to 0·47, and in the decennium 1881-90 to 0·59. These figures cannot, however, be used in comparison with those for the chief towns of the Colony, inasmuch as no correction can be made for differences in the composition of the respective populations as regards age and sex distribution.

Such mortality statistics as the above may, therefore, be dismissed as being of no practical value in estimating the exact extent of the occurrence of the disease. They are not even of much value in deciding whether the disease is increasing or decreasing or is stationary in the Colony, by comparison of one year with another, for the populations on which the rates are calculated are necessarily only estimations based on the results of the widely separated Censuses of 1891 and 1904, estimations which, in view of the fluctuating nature of the populations, can be nothing but misleading.

Occurrence of Malignant Disease in the Cape Peninsula.

In 1901, on the commencement of the outbreak of Plague in Cape Town, an arrangement was made with the Registrar General by which an exact transcript of all deaths registered in the Peninsula was transmitted each day to the Medical Officer of Health for the Colony, in order that it might be scrutinised for the purpose of ascertaining whether, in the case of any death, there was suspicion of it having been due to Plague. It occurred to me, however, that such a list might also be profitably employed for the purpose of investigating the occurrence of Cancer in the Peninsula, and, accordingly, from that date to this, this return has been continued and the particulars of every recorded case of Cancer abstracted, and, as far as possible, careful enquiries made into the circumstances relating to the case. But, unfortunately, owing to the shorthandedness of the staff, it has not been possible to make such complete enquiries as is desirable.

The statistics thus collected have been allowed to accumulate for some years, in order to obtain a number sufficient to render deductions reliable, and we thus have particulars from the 1st of March, 1901, when the enquiry was first commenced, to the 30th June, 1906, of a total of 573 cases, which number would appear to be sufficient to warrant some preliminary consideration. It is intended, however, to continue the system until a much larger number of cases has been brought together.

Of these 573 cases, all were certified to by Medical Practitioners, some few after the performance of a *post-mortem*. Nevertheless, in the case of many of the medical certificates, there is a good deal of indefiniteness, the kind of malignant disease, the part of the body

invaded and other particulars often being omitted. There are, moreover, good grounds for believing, in some of the cases in which the particulars actually given have not been verified by *post-mortem* examination, that they were not altogether accurate. There is also no doubt that the information is much less accurate in regard to cases occurring among Coloured persons than it is for Europeans; it is probable that a not inconsiderable number of cases among the Coloured population are not reported as Cancer at all, and, therefore, do not figure in these statistics.

Dealing, however, with the cases as we find them recorded, 36 of the 573 are reported as Sarcoma, 484 as Carcinoma, while in 53 cases the particular kind of malignant disease was not stated, the numbers of the different classes being proportionately about the same for each year of the period under review. Of the Sarcoma, 28 cases occurred among Europeans and 8 among Coloured persons, 20 of them being among males and 16 among females. Of the Carcinoma, 326 occurred among Europeans and 158 among Coloured persons, or 243 among males and 241 among females. Of the unspecified cases, 36 were Europeans, 18 being males and 18 females, and 17 were Coloured, 8 being males and 9 females. It is probable, in view of the advanced age of many of the patients and the regions of the body affected, that the majority were due to Carcinoma.

The Table below shows the parts of the body primarily affected in the Sarcoma, Carcinoma and the unspecified cases.

RETURN shewing the parts of the body primarily affected in 573 cases of Malignant Disease in the Cape Peninsula :—

Part of body primarily affected.	NATURE OF DISEASE.									Total.		
	Sarcoma.			Carcinoma.			Not specified.					
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Lip ... ..	...	...	...	4	1	5	...	...	...	4	1	5
Tongue ... ..	...	...	...	17	...	17	1	...	1	18	...	18
Palate and Fauces ... ..	...	...	...	6	...	6	...	...	...	6	...	6
Oesophagus	2	...	2	20	...	20	3	2	5	25	2	27
Stomach	1	...	1	72	49	121	1	3	4	74	52	126
Intestines, Mesentery & Peritoneum	2	1	3	19	16	35	2	8	10	23	25	48
Rectum ... ..	...	...	...	10	7	17	...	1	1	10	8	18
Larynx	2	...	2	14	3	17	1	...	1	17	3	20
Lungs ... ..	...	1	1	6	1	7	2	1	3	8	3	11
Liver	1	...	1	30	25	55	2	3	5	33	28	61
Spleen ... ..	...	...	...	1	2	3	...	...	...	1	2	3
Pancreas ... ..	...	...	...	8	4	12	2	...	2	10	4	14
Bladder ... ..	...	...	...	5	2	7	2	...	2	7	2	9
Kidney	1	2	3	3	...	3	...	...	...	4	2	6
Testis	1	...	1	...	...	...	...	...	...	1	...	1
Uterus and Appendages ... ..	...	2	2	...	65	65	...	2	2	...	69	69
Ovary and Appendages ... ..	...	...	...	...	5	5	...	1	1	...	6	6
Breast ... ..	...	2	2	...	39	39	...	...	...	...	41	41
Pelvis ... ..	...	3	3	...	...	...	...	...	...	...	3	3
Neck	5	...	5	4	...	4	3	...	3	12	...	12
Face and Jaw	2	...	2	9	6	15	1	1	2	12	7	19
Parotid ... ..	...	...	...	2	...	2	...	...	...	2	...	2
Nose ... ..	...	...	...	...	1	1	...	...	...	...	1	1
Ear ... ..	...	...	...	1	...	1	...	...	...	1	...	1
Eye ... ..	...	1	1	...	...	...	...	...	...	...	1	1
Brain and Spinal Cord ... ..	...	...	...	3	2	5	2	...	2	5	2	7
Limbs	2	2	4	1	3	4	...	...	...	3	5	8
Heart ... ..	...	...	...	...	...	...	1	...	1	1	...	1
Not specified	1	2	3	7	*11	18	4	4	8	12	17	29
Total	20	16	36	242	242	484	27	26	53	289	284	573

* Includes one person dying of rodent ulcer.

In the subjoined Table is given an analysis of the 573 cases, according to their occurrence at the different age periods of life, shewn separately for Sarcoma, Carcinoma and unspecified cases :—

ANALYSIS according to age of 573 Deaths from Malignant Disease in the Cape Peninsula :—

Form of Malignant Disease.	Ages.											Total
	0-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75 & upwards	
Sarcoma ...	6	1	...	1	2	3	7	7	7	1	1	36
Carcinoma ...	...	...	...	1	6	23	79	129	128	*83	35	484
Not specified	1	...	...	...	...	4	7	12	12	13	4	53
Total ...	7	1	...	2	8	30	93	148	147	97	40	573

* Includes one person dying of rodent ulcer.

The above figures are too small to enable any reliable proportions to be calculated in order to shew the influence of age upon the occurrence of the disease, but some useful information may be obtained if we divide the ages into all under 35 years and all over that age. If this be done it will be found, taking all deaths from all kinds of malignant disease, that an annual death rate of 0·57 per ten thousand occurred in the population under 35 years of age, and one of 19·12 in persons over that age, the annual death rate at all ages being 5·09 per ten thousand of the population. The annual death rate at all ages for Europeans, was 6·16 per ten thousand and for Coloured, 3·72.

If, however, we deal only with cases of Carcinoma, the rate was then only 0·34 per ten thousand of persons under the age of 35 and 16·56 per ten thousand over that age.

In calculating these proportions, I have taken the Census figures of April, 1904, as being near the middle of the period of the five years we are dealing with, and, therefore, more likely to be correct than any calculated populations based on this Census and the previous Census of 1891.

Cancer in Families.

It was sought to ascertain whether these records afforded any information on the subject of the special occurrence of Cancer in particular families or in particular houses. For this purpose, special investigations were made into all cases in which there were deaths of more than two persons bearing the same name, as well as into all cases dying at the same address. Such a method of enquiry, however, is obviously incomplete, for, in the first place, it only presupposes a possible connection between cases when the names are the same or the addresses alike, but, clearly, there may be cases of relatives suffering from the disease although bearing a different name, and cases may have occurred in persons who, although dying at one address, had previously resided in

some other dwelling where another case of Cancer had occurred. Moreover, in regard to addresses, a great source of error was introduced owing to an extensive re-numbering of streets which has taken place in Cape Town during the past few years.

But another circumstance putting a very important limitation to the enquiry, was the fact that it only covers a period of a little over five years, whereas the connection between one case and another, especially in a disease of comparatively long duration such as Cancer, may have existed over a much longer period than this.

Nevertheless, in spite of these limitations, the enquiry brought out the fact that, among these 573 deaths, there were a number of interesting groups of cases. While I am not prepared to make deductions on such a small number of cases, it appears desirable to furnish a few brief notes in regard to these groups, as they may be of use in future investigations, when the number of events has increased.

These groups number in all nine, and comprise in all 19 deaths out of the 573 cases, and they fall into two classes, namely, a class in which two or more blood relatives have died of the disease within the five years under review, and the other in which two or more of the persons dying have been associated with one another, either by relationship or residence in the same house. But several of the groups have cases falling within both classes. The following are the particulars:—

(1) An unmarried lady, living in Breda Street, Cape Town, became ill in May, 1903, and died of Sarcoma of the left breast on the 7th January, 1904, aged 46.

Her unmarried sister nursed her during her illness, and shortly after her death this lady herself became ill and developed Carcinoma of the stomach, from which she died on the 11th February, 1906, aged 63.

In connection with these two cases the following other cases are noted. The mother is reported to have died of cancer twenty years previously; another daughter is stated to have died of Cancer in 1894, and the daughter of the father's half-brother died of Carcinoma of the uterus, aged 72 years, in August, 1906.

(2) A male child, aged 1 year 8 months, living in Bree Street, Cape Town, died of Sarcoma of the kidney on the 26th November, 1904.

An aunt of this child died in the same house on the 26th November, 1905, aged 48, of malignant disease of the abdomen and right lung.

(3) A European lady, living at College Road, Rondebosch, died on the 8th October, 1901, of Carcinoma of the stomach, at the age of 77.

Her son became ill at the end of 1901, and died at Wynberg Cottage Hospital on the 10th July, 1902, of Carcinoma of the larynx, at the age of 50.

(4) A European lady, living off Orange Street, in the Gardens, in February, 1902, became ill and died on 15th September of the same year, the disease being Sarcoma with multiple dissemination of the disease.

Her daughter became ill in October, 1902, and died on the 28th January, 1903, from Sarcoma of the lung, aged 22.

It is also reported that the father of the latter, and the husband of the first-named patient, died in 1904 of rodent ulcer of the face.

(5) A European male, living for some $5\frac{1}{2}$ years in Loader Street, Cape Town, became ill towards the end of 1902, and died on the 22nd February, 1903, of Cancer of the larynx, at the age of 55.

At his death the family removed from the house which was then taken by an engine driver, a European, who developed an illness lasting for some time and of which he died on the 9th January, 1904, at the age of 68, the disease being Cancer of the lip.

An elder brother of the first case lived for six or seven years in Cornwall Street, Woodstock, but frequently visited his brother. Towards the end of 1903 he became ill, and died on the 5th August, 1905, from Cancer of the palate and throat, aged 66.

(6) A European lady, living at Irwinton Road, Sea Point, became ill towards the end of 1902, and died on the 29th of July, 1903, at the age of 63, of what was certified to be Intestinal Cancer.

After her death, her husband left this place of residence and went to live in Cape Town, where early in 1905, he became ill and died on the 11th May, 1906, of Carcinoma of the liver, aged 69.

(7) A European lady, living in the Main Road, Green Point, became ill at the beginning of 1903, and died on the 6th April, 1904, of Sarcoma of the right kidney, at the age of 78.

Her husband continued to reside in the same house and became ill at the beginning of 1905, and died of Carcinoma of the parotid on the 29th January, 1906, at the age of 80.

(8) A European male, living at Gordon Street, Cape Town, became ill at the beginning of 1903, and died on the 15th August of the same year, of Cancer of the stomach, at the age of 71.

After his death, his wife left this house and went to reside in another house in the same locality. Towards the end of 1904 she became ill, and died at the age of 66, on the 15th May, 1905, of Cancer of the pancreas and duodenum.

(9). A European male, living at Mowbray, became ill at the end of 1900, and died on the 24th December, 1901, of Cancer of the rectum, aged 53.

His wife had been suffering from Epithelioma of the face since 1890 and died of this disease, aged 55, at Woodstock, on the 18th June, 1906.

I am not prepared to generalise on such limited data as the above cases afford, but it may be pointed out that they include four events in which both husband and wife died within the five years of malignant disease. In one of these cases, however, the wife died of Sarcoma and the husband of Carcinoma; but in the other three cases, the Cancer was of similar type in both husband and wife. In these cases we may assume that no blood relationship existed. In the same category we must place the case of the engine driver (Group No. 5) who died of Carcinoma of the lip in 1904, after inhabiting a house in which another European male had died a year previously of Carcinoma of the larynx, and whose brother died in 1905 of Carcinoma of the palate and throat. These then form a group of three cohabiting pairs, and one pair occupying the same house dying within the five years of the same type of Cancer, with a possibility of another pair, unless the diagnosis of Sarcoma of the kidney at the age of 78 was correct.

We also have five groups in which the occurrence of the disease might well be explained by heredity, and in this set the difference in the nature of the type of malignant disease is, of course, not of so much importance. These groups consist of two sisters with whom might be included also the mother and another sister, had they not died prior to the period under review; a

mother and a daughter (not counting the father, who is stated to have died of rodent ulcer in 1904); a mother and a son; two brothers; and an aunt and a nephew.

At first sight, nineteen connected cases out of a total of 573 seems a somewhat large number, more especially when the very limited means of ascertaining such connection in the remaining 554 cases is remembered, and also the limitation of the enquiry to the Peninsula, together with the shortness of the period of five years covered by it, as applied to the life history of these persons and that of their relatives and associates. This view might be strengthened by a consideration of what has been found to be the case in Leprosy, which is recognised as a contagious disease. Among 558 cases of Leprosy confined on Robben Island in 1903, a careful enquiry elicited the fact that, in the case of 379, they were members of families in which no other instance of the disease had occurred, whilst 189 were members of families in which two or more cases had occurred; there having been in 67 cases two members in the same family; in 48, 3 Lepers; in 33, 4 Lepers; in 32, 5 Lepers; in 5, 6 Lepers, and in 4, 7 Lepers.

In regard to this enquiry, it must, however, be noted that whereas the case of every one of the 558 Lepers was enquired into, only a very limited number of the 573 deaths from Cancer was investigated. Also that of the relatives of the 558 Lepers only a few were at the time confined at Robben Island and included in that number; the figures, therefore, dealt with the state of at least 1,100 Lepers. Also that Leprosy is a disease of long duration, and therefore the history of the Lepers and of their affected relatives covered a period of very many years, probably not less than 25 or 30 years, instead of the five we have been dealing with in the case of these deaths from Cancer.

But in any consideration of these figures, the very important fact must not be lost sight of that Cancer is a disease of late adult life, and that if we take the comparatively small number of persons living at the Cancer ages, and the fact that the great majority of them are husbands and wives, a very large proportion of those persons must, in the ordinary course, die of the disease, and that, on the ordinary theory of probabilities, a considerable number of such cases in any community will be connected with one another without the operation of any other cause than that of co-incidence. Nevertheless, making every allowance for co-incidence and for the acknowledged effect of heredity, I think the above instances of group incidence are of enough importance to be placed on record.

6. GOVERNMENT AND STATE-AIDED HOSPITALS.

System of Government Inspection.

The Medical Officer of Health for the Colony has continued during the two years covered by this Report to inspect all Government and State-aided Hospitals of the Colony. It is to be regretted, however, that, owing to the shorthandedness of the staff, it has not been possible to carry out the original intention of inspecting every hospital at least once each year: to do so would require the entire services of one medical officer for at least some six months each year,

whereas hitherto the whole staff of this Office for all purposes has consisted of but one medical officer in addition to myself. It is hoped, however, that with the assistance of an additional medical officer, to be provided on the ensuing Estimates, the ideal we have set ourselves will be attainable. During the past two years, I have taken advantage of any occasion on which a medical officer has been present in any centre in which there is a public Hospital, to cause the Hospital to be inspected. The following return shows the inspections which have thus been performed during the two years, 1904 and 1905, and during the earlier part of the present year, with the names of the medical officers making the inspections :—

Name of Institution.	Date of Inspection.	Name of Inspecting Officer.
State-Aided.		
Colony Proper :		
Albany General Hospital ...	{ 4.12.04	Dr. P. Fenoulhet.
	27.4.06	Dr. D. C. Rees.
Barkly West Convalescent Home ...	{ 30.11.04	Dr. J. A. Mitchell.
	19.1.06	Dr. E. N. Thornton.
Somerset Hospital ...	15.3.04	Dr. J. A. Mitchell.
Suburban Hospital, Woodstock ...	7.3.04	do.
Rondebosch and Mowbray Cottage Hospital	2.2.04	do.
Victoria Cottage Hospital, Wynberg	9.3.04	do.
Eaton Convalescent Home, Plumstead	11.3.04	do.
Cape Town Free Dispensary ...	25.4.04	do.
Simon's Town Cottage Hospital ...	Opened 1.4.05 ;	not yet inspected.
Queen's Central Hospital, Cradoek ...	4.10.05	Dr. E. N. Thornton.
Frere Hospital, East London ...	{ 22.5.05	Dr. J. A. Mitchell.
	15.5.06	do.
Midland Hospital, Graaff-Reinet ...	1.3.06	Dr. E. N. Thornton.
Kimberley Hospital ...	15.1.06	do.
Victoria Hospital, Mafeking ...	24.1.06	do.
Royal South-Western Hospital, Oudtshoorn	6.3.06	do.
Provineial Hospital, Port Elizabeth...	{ 7.4.05	Dr. J. A. Mitchell.
	21.5.06	do.
Victoria Memorial Home, Port Elizabeth	{ 8.4.05	do.
	19.5.06	do.
Frontier Hospital, Queenstown ...	2.10.05	Dr. E. N. Thornton.
Queen Victoria M.H., Stellenbosch ...	Opened 27.2.05 ;	not yet inspected.
Uitenhage Cottage Hospital ...	{ 15.4.05	Dr. J. A. Mitchell.
	22.5.06	do.
Victoria Hospital, Lovedale ...	Not included as a State-aided Hospital until 1904 ; not	yet inspected.
Vryburg Hospital ...	12.1.06	Dr. E. N. Thornton.
Native Territories :		
Butterworth Cottage Hospital ...	20.9.05	do.
East Griqualand & Usher M. H., Kokstad	13.10.05	Dr. G. W. Robertson.
Umtata Cottage Hospital ...	7.10.05	do.
Government Institutions :		
Colony Proper.		
Chronic Sick Hospital, Graham's Town	{ 6.12.04	Dr. P. Fenoulhet.
	29.4.06	Dr. D. C. Rees.
Old Somerset Hospital, Cape Town ...	14.5.06	Dr. E. N. Thornton.
Grey Hospital, King William's Town	{ 16.5.05	Dr. J. A. Mitchell.
	23.8.05	Dr. E. N. Thornton.
Klipdam Seurvy Hospital ...	20.1.06	do.

As far as possible, all inspections are of the nature of surprise visits, that is, only short notice of the intended inspection is given to the Hospital authorities, so that the Inspector may find the Hospital at the time of his inspection in its usual condition.

I am pleased to be able to record that since these inspections were commenced they have been the means of bringing about great improvement in the internal administration of the Hospitals. They have also brought the Hospital managements into closer and more direct touch with the Government, to the benefit of all those engaged in the administration and guidance of this important section of the public work.

I ought also to take this opportunity of expressing appreciation of the cordial manner in which every Hospital Board, without exception, has welcomed these inspections of the Government and assisted me and my Officers in making them a success. The Boards and their officials have also been unsparing in supplying—often at considerable pains—the complex statistical information which it has been found necessary to obtain concerning the working of the Hospitals under their management.

In dealing with the information thus gathered in the course of the inspections, I propose, in the first place, to furnish some general and comparative statistics relating to Hospitals as a whole, and then to give a few brief notes regarding particular institutions, which may be of special interest.

General Statistical Information.

In a series of returns printed in Annexure “B” to this Report will be found gathered together full statistical information regarding the working and general administration of all Government and State-aided Hospitals in the Colony. Every means has been taken to make this information as accurate as possible, but it may be that some discrepancies have crept in, owing to the absence of uniformity in the keeping of Hospital accounts and records. This absence has caused much difficulty in the compilation of the returns.

The returns in question relate to each of the two years, respectively, ending on the 31st December, 1904 and 1905, and, they furnish the following particulars:—

Table 1 is a return giving particulars in regard to the *Patients* treated during each year, and shewing to what extent each institution has been in occupation during the period under review.

Table 2 is a return shewing the exact *Staff* employed in each Hospital, compared with the number of beds and daily average number of patients.

Table 3 is a return shewing the *Ordinary Revenue* of each State-aided Hospital, together with a comparative statement indicating the percentage proportion of ordinary revenue contributed by the General Public, Paying Patients, Public Bodies, the Government, and other sources.

Table 4 is a return of the *Ordinary Expenditure* of each Hospital for each of the two years, grouped under certain main heads of administration.

Table 5 is a return shewing the *Average Daily Cost* per patient during each of the two years in each Government and State-aided Hospital, and the proportion of the average daily cost per patient which is defrayed, respectively, by the Government and by the other ordinary sources of revenue of each institution.

Table 6 is a return shewing the *Tariff of Charges* made in each institution for treatment in Private Wards, Semi-private Wards, and General Wards, as well as the Tariff of Fees for members of the Police Force, Cape Mounted Riflemen, Railway employes and Government Pauper and Venereal cases, respectively.

Table 7 is an analysis of the *Extraordinary Revenue and Expenditure* of each State-aided Hospital during the two years, compiled from all available information.

Table 8 is a return shewing the *Assets and Liabilities*, exclusive of buildings, land, and other property used for the purposes of the institution, of each State-aided Hospital, at the end of each of the two years under review.

Number of Patients treated. Effects of the general depression.

The following comparative Table shews the total number of patients, both European and Coloured, treated in the State-aided Hospitals and in Government Institutions, respectively, during the last three years :—

	State-aided Hospitals.			Government Hospitals.			Government and State-aided Hospitals.		
	1903	1904	1905	1903	1904	1905	1903	1904	1905
European	6091	6097	5445	473	613	669	6564	6710	6114
Coloured	3972	3809	4321	536	770	844	4508	4579	5165
Total	10063	9906	9766	1009	1383	1513	11072	11289	11279

From the above it will be seen that during 1903, 11,072 in-patients were treated in all Government and State-aided Hospitals throughout the Colony, of which number 6,564 were Europeans, and 4,508 other than Europeans. In 1904 the numbers had risen to 11,289, of which 6,710 were Europeans, and 4,579 other than Europeans. This increase was just maintained during 1905, for which year the numbers were 11,279, 6,114 being Europeans and 5,165 Coloured.

But totals of this kind do not convey any clear insight into the actual activities of the Hospitals. If, however, we consider the statistics separately for State-aided and Government Hospitals, we find that, in the purely State-aided Hospitals, the number of patients treated has progressively *decreased* from 10,063 in 1903, to 9,906 in 1904, and 9,766 in 1905. Of Europeans, the number treated in these institutions was 6,091 in 1903, 6,097 in 1904, and 5,445 in 1905; and of Coloured patients, 3,972 in 1903, 3,809 in 1904, and 4,321 in 1905. The diminution in the total number of patients treated in these institutions has been, therefore, almost entirely due to the falling off in the numbers of Europeans, who were 652 less in 1905 than in 1904, and 646 less than in 1903. The Coloured patients, although they decreased slightly in 1904, show a considerable increase for 1905.

On the other hand, in the purely Government Hospitals there has been a progressive *increase*, both in European and Coloured patients, the figures being 1,009 in 1903, of which 473 were Europeans and 536 Coloured; 1,383 in 1904, of which 613 were Europeans and 770 Coloured; and 1,513 in 1905, of which 669 were Europeans and 844 Coloured.

But, in order to institute a true comparison of Hospital activities for the three years, it is necessary to make certain corrections. In the first place, it is necessary to distinguish between General Hospitals and Institutions for the treatment of Chronic Sick, and if this be done the Government General Hospital at King William's Town must be grouped with the figures of the other General Hospitals, leaving the two Government Chronic Sick Hospitals at Graham's Town and Cape Town by themselves. Also during the last two years other hospitals have joined the list of recognised State-aided Hospitals and swelled the totals. Thus, the Barkly West Hospital and Convalescent Home, closed during the war, was only re-opened on the 30th April, 1904. The Victoria Hospital, Lovedale, was first included in the list of State-aided Hospitals in 1904, and had, therefore, not been included in the returns for 1903. The Uitenhage Cottage Hospital was first opened for the reception of patients only on 1st July, 1904. In 1905, two further hospitals were opened, namely, the Queen Victoria Memorial Hospital, Stellenbosch, to which the first patient was admitted on 27th February, and the Simon's Town Cottage Hospital, opened on the 1st April. In the additional hospitals above-mentioned, 351 patients were admitted in 1904, of which 81 were Europeans and 270 Coloured persons, and in 1905, 610 patients were treated, of which 239 were Europeans and 371 Coloured.

Therefore, to draw correct deductions regarding the rise or fall of hospital activities in 1904 and 1905, as compared with 1903, the figures relating to these new recruits must be excluded, although, of course, it is probable that, had they not come into existence, a few of their patients would have been treated in some of the older hospitals.

In the following Table, the patients treated in the Government and State-aided Hospitals during the last three years are shewn, with these corrections, grouped under those of General Hospitals and Chronic Sick Institutions, respectively, while from among the former the Barkly West Hospital and Convalescent Home, the Victoria Hospital, Lovedale, the Uitenhage Cottage Hospital, the Queen Victoria Memorial Hospital, Stellenbosch, and the Simon's Town Cottage Hospital have been excluded.

	General Hospitals, including King William's Town Government Hospital.			Government Chronic Sick Hospitals.			All Government and State-aided Hospitals.		
	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.
European	6,238	6,157	5,317	326	472	558	6,564	6,629	5,875
Coloured...	4,261	3,936	4,356	247	373	438	4,508	4,309	4,794
Total ...	10,499	10,093	9,673	573	845	996	11,072	10,938	10,669

It is now at once seen that since 1903 there has been a very marked drop in the activities of the General Hospitals for the treatment of acute diseases, the total number of 10,499 patients under treatment in 1903 having fallen, in 1904, to 10,093, and in 1905, to 9,673. Furthermore, this decline has practically been confined to European patients, these having decreased from 6,238 in 1903, to 5,317 in 1905, while, with a slight decline in 1904, the number of Coloured patients exceeded in 1905 the number in 1903.

On the other hand, in the case of the Chronic Sick Asylums, the stay of whose inmates it must be remembered is long, the number has increased from 573 in 1903, to 996 in 1905, the greater increase being of Europeans, namely, from 326 in 1903, to 558 in 1905; the increase of Coloured being from 247 in 1903, to 438 in 1905.

There can be no doubt that these are but results of the serious financial depression through which the Colony has been passing. The decrease in the number of European patients in General Hospitals is partly due to the migration of Europeans, but it is also largely the effect of the objection of many of those, who are fortunate to have employment, to break from it for the purpose of undergoing medical treatment, in case they thereby lose their engagements; in other words, a large number of people could not afford to be ill during a period when resources were reduced and employment was scarce. These conditions would not apply so forcibly to the Coloured community, and, indeed, in depressed times like the present one would expect them to come forward more freely when out of work, or when money is too scarce to provide treatment in their own homes.

But these considerations did not affect the chronic sick, the infirm and incapable. On the contrary, the help of friends failing them in the hard times, they have been forced into the Government Asylums, the pressure naturally affecting to a greater extent the European.

Moreover, the depression has also considerably affected the relative proportions of paying and free patients treated in the Hospitals during the last two years. In 1903 there were 4,029 paying, and 7,043 free in-patients, including in the latter some chronic sick, syphilitics, and other patients treated in the General Hospitals at the expense of the Government. In 1904 there were 3,947 paying and 7,342 such free patients; in 1905 there were only 3,709 paying patients, the remaining 7,570 being free. The percentage proportion of paying patients to the total number of patients was, therefore, 36.4 in 1903, 35.00 in 1904 and only 32.9 in 1905.

Statistics of Out-Patients.

Coincidentally with the decline of in-patients there has been an apparent increase of work in the out-patient departments of the hospitals, the number of attendances of out-patients at State-aided institutions being, in 1903, 29,302, in 1904, 36,367, and in 1905, 39,279. But here again, if correct comparisons are to be drawn, the attendances at the Hospitals opened in 1904 and 1905 have to be deducted. If this be done, the real increase is found to be inconsiderable, for the corrected numbers then are 29,175 in 1904 and 32,153 in 1905. The only Government institution which has an

out-patient department in connection with it is the Grey Hospital, King William's Town. At this Hospital the number of attendances has very markedly increased, being 3,922 in 1903, 5,981 in 1904, and 6,380 in 1905.

Comparison of the work done by State-aided Hospitals in different Years.

While the rise or fall in the number of patients treated is a good criterion of the extent of the usefulness of the Hospitals to the sick, it by no means affords a gauge of the actual amount of work performed by the institutions. This is better shown by the total daily average number of patients under treatment, which for Government-aided Hospitals was, in 1903, 759·6 ; in 1904, 731·2 ; and in 1905, 743·4. Or, if the work of the Hospitals newly opened in the years 1904 and 1905 be deducted, then the figures for these years were respectively 708·7 and 706·6. It will be noticed that while the total number of patients in these Hospitals considerably decreased during the year 1905, the fall in the daily average of patients under treatment has not been proportionally great, this being due to the fact that during 1905 every patient under treatment was kept in Hospital, on an average, one day longer than was the case during 1904 ; the average duration of stay of each patient was, in 1903, 27·13 days ; in 1904, 26·81 days ; and in 1905, 27·73 days. The cause of this increased stay was, doubtless, owing to the beds and the resources of the Hospitals not having been required for fresh cases, the patients were not discharged as promptly as usual.

The same facts are indicated by a consideration of the amount of work done per hospital bed. In 1903, the total number of beds provided by the State-aided Hospitals amounted to 1,211 ; in 1904, they numbered 1,282, and in 1905, 1,314, these increases being due to the opening of the new Hospitals already detailed. During 1903, each bed was occupied, on an average, for a total of 229·2 days by an average of 8·6 patients each. During 1904, these averages fell to 207·1 days and 7·7 patients, and during 1905 to 206·1 days and 7·4 patients. If the returns of the new Hospitals be deducted to enable an exact comparison with 1903 to be made, then, for 1904, the number of days each bed was occupied was 212·3 days by an average of 7·8 patients, and for 1905, 210·5 days and 7·5 patients.

The Staffs of the Government-Aided Hospitals.

It is necessary to see how far the staffs of the Government-aided Hospitals have been reduced in accord with the decreased amount of work having to be performed. In 1903, the total number of the nursing staff employed in such Hospitals was 233, and of the remaining wholetime staff 255. In 1904, the number of nurses was 251, and the wholetime staff other than nurses 280, and in 1905, 259 and 278 respectively. But these numbers include, in 1904, 10 nurses and 11 other officers, and in 1905, 17 nurses and 19 other officers, being the staffs of the newly-opened Hospitals. Deducting these, we find that instead of the staffs of the Hospitals having been reduced in accord with the decreased number of patients, and especially with the great reduction in European and paying patients, they have actually increased during the last two years,

the increase being greatest in the nursing staffs. This is more clearly brought out in the accompanying table :—

Year.	Total No. of Patients.			Total No. of Staff.		Daily Average No. of Patients throughout the Year.	Daily Average No. of Patients per Nurse.
	Paying.	Free.	Total.	Nursing.	Other whole time Employees.		
1903 ...	3,921	6,142	10,063	233	255	759·6	3·26
1904 ...	3,520	6,035	9,555	241	269	708·7	2·94
1905 ...	3,127	6,029	9,156	242	259	706·6	2·92

While allowances may be made for those Hospital administrations which, calculating upon an early return to normal times, failed to adequately adjust their staffs in proportion to the fall in the work of the Hospital, yet there can be little excuse for those which actually increased their staffs in face of a reduced amount of work to be performed.

Speaking generally, there is, in my opinion, a common tendency on the part of Hospital Boards to maintain an unnecessarily large staff, more especially of nurses. In this matter, however, Boards are largely dependent upon the advice given them by their professional officers, and as these usually take into consideration the question of efficiency rather than of economy, excess is the result.

Average Cost per Patient.

Although Hospital Boards have not during the past two years adjusted the extent of their staffs to the amount of their diminished needs, they have, nevertheless, by economies in other directions, succeeded in reducing their ordinary expenditure so as to keep a fairly level “average daily cost per patient.” Taking all Government-aided Institutions, the average daily cost per patient was, in 1903, 6s. 7·12d., in 1904 it was 6s. 11·93d., and in 1905, 6s. 9·31d. For purposes of comparison, however, we must exclude those hospitals already mentioned as having been opened during these last two years, which if done, we find the daily average cost was 6s. 11·85d. in 1904, and 6s. 8·93d. in 1905.

In the subjoined Table, the daily average cost per patient in all Government-aided Institutions, including those added during 1904 and 1905, has been apportioned to the different items of expenditure of salaries and wages to staff, provisions and supplies to patients and staff, stimulants, and all other items, for each of the three years under consideration. From this it will be seen that the average daily cost has increased during the past two years in respect of the cost of staff and the cost of “other items” (which include fuel, light, medicines, washing and sanitary charges), while the reduction of the cost in 1905, as compared with 1904, was really due to a saving of 2·3d. per patient per diem on provisions :—

Year.	Average Daily Cost per Patient.				
	Salaries and Wages to Staff.	Provisions and Supplies to Patients and Staff.	Stimulants.	Other Items.	Total.
1903	s. d. 1 11·61	s. d. 2 5·14	s. d. 0 0·85	s. d. 2 1·52	s. d. 6 7·12
1904	2 1·10	2 5·10	0 1·03	2 4·70	6 11·93
1905	2 0·68	2 2·81	0 0·87	2 4·95	6 9·31

Ordinary Revenue and Expenditure of State-aided Institutions.

The following statement gives a comparison of the Ordinary Revenue and Expenditure, exclusive of any balances from the preceding year, of all State-aided Institutions during each year 1903, 1904 and 1905 :—

		Ordinary Revenue.			Ordinary Expenditure.			Surplus.		
		£	s.	d.	£	s.	d.	£	s.	d.
1903	...	100,507	6	9*	...	92,511	15	7	...	7,995 11 2
1904	...	99,738	14	7	...	93,688	4	4	...	6,050 10 3
1905	...	101,600	15	1	...	92,606	13	9	...	8,994 1 4

While there has been the above surplus, which was largely due to one or two institutions, chief of which is the Kimberley Hospital, which in 1903 had a surplus of £2,364, in 1904 one of £5,089, and in 1905 one of £6,322, there are a number of institutions which have experienced deficits.

During 1904, the total revenue included £3,048, and the total expenditure £2,252, by the operation of new hospitals, and in 1905 £5,935 and £4,771 respectively ; so that, excluding these contributors, there has been a steady decrease both in the revenue and expenditure during 1904 and 1905.

It is of interest to note the adequacy or otherwise of the ordinary revenue, as compared with the ordinary expenditure, of the different State-aided hospitals, and for this purpose I have had prepared the subjoined table, which shows in regard to each such hospital the amount of the excess or deficit, as the case may be, during each of the three years, 1903, 1904 and 1905, between the ordinary revenue and the ordinary expenditure of the year in question. Of course, such a table does not in any respect show the actual financial stability of a hospital, as there may be a considerable reserve fund to draw upon, or the revenue or expenditure in any particular year may have varied abnormally. Nevertheless, taking the series of three years, it shows fairly clearly whether a hospital's ordinary receipts are, on the whole, equal to its ordinary commitments :—

* The total ordinary revenue for 1903 does not include the revenue for the Vryburg Hospital for that year, the exact amount not being available, but it was approximately £1,500.

TABLE showing the difference between the Ordinary Revenue and Ordinary Expenditure of State-Aided Hospitals during the three years, 1903, 1904 and 1905 :—

Name of Institution.	1903.		1904.		1905.		1903-1905.	
	Excess.	Deficit.	Excess.	Deficit.	Excess.	Deficit.	Excess.	Deficit.
Albany General Hospital ...	£ s. d.	£ s. d.	£ s. d.*	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Barkly West Convalescent Home ...	... Not open	100 4 6	329 8 3	175 18 5	... 1 6	29 16 0	... 9 9	305 18 11
Somerset Hospital ...	3,307 16 7	...	60 0 6	290 2 8	739 1 3	817 12 9	481 9 9	...
Suburban Hospital ...	465 3 6	36 5 10	...	428 12 11	707 9 0	...	2,200 1 2	...
Rondebosch and Mowbray Cottage Hospital ...	159 1 3	...	235 17 2	...	191 3 9	...	1,264 5 3	...
Victoria Cottage Hospital ...	Nil	Nil	...	134 16 4	114 1 7	...	242 10 3	...
Eaton Convalescent Home ...	116 1 9	...	...	66 18 9	28 5 10	...	586 2 2	20 14 9
Cape Town Free Dispensary ...	Not open	145 5 5	Not open	open	502 8 1	...	77 8 10	...
Simon's Town Cottage Hospital ...	...	425 18 8	883 9 9	458 14 5	...	431 18 0	502 8 1	...
Queen's Central Hospital ...	1,241 12 10	...	...	129 5 11	370 15 5	169 6 7	1,955 16 0	1,035 17 10
Frere Hospital ...	...	...	5,089 10 3	...	6,322 12 0	...	...	184 9 2
Midland Hospital ...	2,364 8 4	...	...	253 2 2	63 17 1	...	13,776 10 7	...
Kimberley Hospital ...	295 15 7	...	...	206 4 9	...	271 0 0	106 10 6	...
Mafeking Hospital ...	31 15 10	...	379 17 0	...	...	207 14 2	...	445 8 11
Royal South-Western Hospital ...	397 5 11	...	1,114 12 9	...	845 18 9	...	569 8 9	...
Provincial Hospital ...	2,702 12 9	...	...	279 18 4	...	92 16 9	4,663 4 3	...
Victoria Memorial Home ...	...	361 11 2	...	open	...	...	...	734 6 3
Frontier Hospital ...	Not open	open	Not open	open	305 18 8	...	305 18 8	...
Queen Victoria Memorial Hospital ...	Not open	open	156 5 5	...	219 9 10	...	375 15 3	...
Uitenhage Cottage Hospital...	Not State-aided	Government Hospital	310 12 0	...	when it was handed over to a	16 10 0	294 2 0	...
Victoria Hospital, Lovedale ...	...	50 11 11	...	until 1.3.05,	...	Local Board.	...	...
Vryburg Hospital ...	...	...	...	8 5 4	232 4 2	...	173 6 11	...
Butterworth Cottage Hospital ...	264 4 3	...	154 6 11	...	100 13 9	...	519 4 11	...
East Griqualand and Usher Memorial Hospital ...	...	31 4 9	...	126 11 8	177 1 1	...	19 4 8	...
Umtata Cottage Hospital ...	...	...	...	...	...	...	...	...
Total ...	11,345 18 7	1,151 2 3	8,714 0 0	2,558 11 8	11,073 1 9	2,036 14 3	28,113 8 0	2,726 15 10

The State Contribution.

While, however, the general revenue of hospitals has been falling, the Government annual contribution towards the maintenance of hospitals has been steadily increasing, having been £38,219 11s. 8d. in 1903; £42,032 0s. 0d. in 1904, and £43,766 5s. 6d. in 1905. In addition to these amounts, the Government contributed from the Public Treasury in the shape of extraordinary grants, chiefly towards the erection of new buildings and improvements, but also to meet certain cases of deficiency of ordinary revenue £7,360 14s. 8d. in 1903, £4,121 2s. 9d. in 1904 and £6,341 4s. 11d. in 1905.

The following Table shows in regard to all State-aided institutions the percentage proportion of the total ordinary revenue contributed during the last three years, respectively, by the General Public, Paying Patients, Public Bodies, the Government, and other sources, together with the proportion of the average daily cost per patient that is borne by the Government contribution and by all other sources of revenue, respectively.

Year.	Sources of ordinary Revenue.					Daily Average cost per Patient.	
	Govern- ment Grant.	General Public.	Paying Patients.	Public Bodies.	Other Sources.	Borne by Govern- ment.	Borne by all other sources of Revenue.
1903.	38·03	19·92	23·60	1·74	16·71	s. d. 2 6·09	s. d. 4 1·03
1904.	42·29	14·22	21·69	5·78	16·02	2 11·59	4 0·34
1905.	43·08	15·82	18·06	3·35	19·69	2 11·24	3 10·07

From this Table it will be apparent that practically all sources of revenue have decreased while the Government contribution has yearly increased.

The total extraordinary expenditure of State-aided Hospitals amounted in 1903 to £19,649 8s. 4d., in 1904, to £20,679 4s. 1d., and in 1905 to £24,751 15s. 0d. This expenditure was chiefly in respect of new buildings, improvements and equipment. In 1903, the greater part of the expenditure was incurred in respect of the Somerset (£5,489 3s. 0d.), the Kimberley (£4,809 0s. 0d.) and the Rondebosch (£2,576 15s. 2d.) Hospitals and the Victoria Memorial Home, Port Elizabeth (£2,562 7s. 10.). In 1904, by the Somerset (£2,116 0s. 3d.), the Kimberley (£5,782 10s. 4d.) and the Lovedale (£2,169 1s. 2d.) Hospitals and the Cape Town Free Dispensary (£7,136 13s. 8d.). And in 1905 by the Somerset (£531 3s. 5d.), the Kimberley (£4,986 10s. 6d.), Wynberg (£4,355 14s. 10d.) and the Cape Town Free Dispensary (£10,812 7s. 2d.).

How it is fixed.

At the present time, the amount of the Government contribution to individual hospitals does not appear to be based

upon any fixed principle, but seems to be mainly dependent upon the particular needs of the institution to be helped. On the whole, such a system may be considered a satisfactory one, if carefully administered and the advice of competent officials be sought in fixing the amount of help needed, and provided that adequate supervision is exercised by the Government over the management of every assisted institution. But unless a very strict watch be kept, it is apt to result in Boards of Management relying too much on the Government contributions and neglecting to foster those sources of income which should in every case be the main support of every hospital, namely, local public and private contributions and receipts from patients. Moreover, it undoubtedly tends in some cases to dull the edge of economy, which is essential to good hospital management. In my opinion, any Government contribution should depend solely upon proof of good and economical control, and in no case should exceed a definite proportion of the whole expenditure. The danger, however, in fixing such a proportion is that Hospital Boards are likely at once to regard a contribution to the extent of such proportion to be their due in every case, and irrespective of particular circumstances. Already in the matter of the erection of new buildings, Boards have come to regard a contribution from Government on the £ for £ principle as their right, and are with difficulty restrained from incurring expenditure on that basis without any prior approval from the Government being obtained by them.

How very divergent are the proportions of the Government annual contributions in the case of different institutions is demonstrated by a consideration of the proportion of the daily average cost per patient defrayed by Government in different Hospitals.

Thus, to take the year 1905, at the Somerset Hospital, where the total daily average cost per patient was 7s. 9·8d., the proportion borne by the Government amounted to 4s. 3·1d.; at the Suburban Hospital, Woodstock, where the average daily cost was 7s. 11·4d., the proportion borne by Government was only 1s. 4·2d.; at the Rondebosch and Mowbray Cottage Hospital, where the total average daily cost per patient was 9s. 8·19d., the amount borne by the Government was 1s. 5·7d.; at the Queen's Central Hospital, Cradock, the average daily cost per patient was 7s. 4·63d., and the amount borne by Government was 4s. 3·4d.; at the Vryburg Hospital, with a daily average cost per patient of £1 5s. 3·39d., in 1905, the proportion borne by the Government was as much as £1 3s. 2·2d.; at the Provincial Hospital, Port Elizabeth, with a daily average cost per patient of 5s. 6·4d., the amount borne by the Government was 3s. 0·1d.; at the Kimberley Hospital, the average daily cost per patient was 6s. 4·2d., and the proportion borne by Government was 1s. 6·8d., and at the Frere Hospital, East London, the daily average cost per patient was 8s. 1·3d., and the proportion borne by Government amounted to 4s. 5·5d.

Of course, the fact must not be lost sight of that several of the larger Hospitals are something more than local institutions, and treat patients coming from all parts of the Colony.

The reader should also consult Table 3 in Annexure "B" to this Report, where are given, in the case of each institution, the proportions of the general revenue derived from the Government and from each other source of income.

Assets and Liabilities.

In Table No. 7, Annexure "B," is given a rough statement of the financial position of each State-aided Institution on the 31st December of 1904 and of 1905. From this it would appear that the total assets on the 31st December, 1905, exclusive of buildings, land, and other property used for the purposes of these Institutions, were as follows :—

Cash at Bank and in hand ...	...	...	£8,438	18	4
Investments on Capital Account :					
Special Purposes ...	...	...	2,620	10	11
For Buildings and Equipment ...	...	...	12,950	5	7
For General Purposes ...	...	...	41,950	19	6
Sundry Debtors :					
Paying Patients' Fees outstanding ...	...	...	3,992	12	6
Other ...	...	...	1,667	15	9
Total ...	...	...	£71,621	2	7

The Liabilities on the same date were : —

Overdrafts...	...	...	£1,036	6	2
Loans ...	...	...	6,797	17	1
Sundry Creditors ...	...	...	14,259	17	10
Total ...	...	...	£22,094	1	1

Variations in the working of different Institutions.

It is desirable to direct attention to two points of comparison in Hospital management which are of considerable importance in judging of the working economy of different institutions. These are the extent to which the available Hospital accommodation is made use of, which is shewn by the occupation of its beds, and the daily average cost of maintenance per patient in the Hospital. Full details in regard to both of these points will be found given in respect of each institution for the years 1904 and 1905 in Tables 1 and 5 of Annexure "B" to this Report.

From these it will be seen how very widely these factors vary in different institutions. Thus, to take the year 1905, while in the Wynberg Cottage Hospital each bed was occupied by 12·7 patients for a total of 283·9 days, and, in the Umtata Cottage Hospital by 12·7 patients for 335·6 days, on the contrary in the Cradock Central Hospital each bed only had 4·0 occupants for a total period of 151·7 days, while in the Queenstown Frontier Hospital there were only 2·8 patients occupying each bed for 119·7 days. The inference to be drawn from these figures is that the accommodation in the Wynberg and Umtata Hospitals is inadequate, and that the Cradock and Queenstown Hospitals are probably larger than are required for the needs of the communities which they are intended to serve. And these inferences are in accordance with the facts, for the Wynberg Hospital has, since 1905, increased its accommodation, and the Umtata Cottage Hospital is about to do so, while in order to obtain their very meagre averages the Cradock Hospital had in 1905 to keep every patient under treatment for an average of 37·9 days, and the Queenstown Hospital for the very extraordinary

period of 42·4 days, these being the highest averages of any general Hospitals, the average for all general Hospitals being in 1905 only 27·7 days.

It is, of course, impossible to fix any hard and fast standard which should apply to every Hospital, but we should probably be correct if we said that a properly working Hospital in this Colony should have an average of about 10 patients to each bed per year, and that each bed should be occupied for at least 250 days in the year.

With regard to the daily average cost per patient, it will be seen that this also varies enormously. Thus, in 1905, the most expensive State-aided Institution was the Vryburg Hospital where the daily average cost per patient amounted to 25s. 3·4d. This hospital was also the most expensive institution in 1904 and 1903, when the daily average cost per patient amounted to 17s. 3d. and 12s. 3d., respectively.

Next to the Vryburg Hospital, the most expensive Institution in 1905, was the Victoria Hospital at Mafeking, where the average daily cost per patient amounted to 12s. 4·1d. This Institution was also the second most expensive Hospital in 1904, when the daily average cost per patient amounted to 12s. 3·6d. The cheapest State-aided General Hospital in 1905 was the Umtata Cottage Hospital, where the average daily cost per patient amounted to 3s. 11·4d., and to 4s. 6·3d. in 1904.

It is, of course, not fair to institute any minute comparison between the average daily cost of patients in different Hospitals, as the locality in which they are situated often necessarily affects the average cost in these institutions, owing to a wide divergence in the local cost of supplies. Moreover, the smaller a Hospital, the more expensive generally is the relative cost of maintenance. These factors, however, can only operate within certain narrow limits, and therefore for purposes of general comparison, the average daily cost per patient can safely be used.

I think it may be taken as a safe working rule that the average daily cost should not exceed 6s. to 6s. 6d., and that if it does there is good ground for suspecting extravagance in some direction or other.

Government Institutions.

With regard to the statistics relating to the purely Government Institutions, there are at present only three of these, one being a General Hospital, the Grey Hospital at King William's Town, and the other two, Chronic Sick Asylums, one at Graham's Town and the other, the Old Somerset Hospital, at Cape Town.

In dealing with the increase in the number of patients treated in General Hospitals, I have already included, for purposes of statistical comparison, in the Table given on page cx, the figures relating to patients treated at the Grey Hospital, with those treated at the other General Hospitals of the Colony, but in the subsequent information I have given, I have concerned myself only with the independent State-aided Institutions. It will, therefore, be necessary now to detail a few figures regarding this Hospital.

In 1903, 436 patients, 147 of whom were European and 289 Coloured, were under treatment. In 1904, the number had risen to 538, this increase being entirely due to an increased number of Native patients, the numbers, respectively, being 141 Europeans

and 397 Natives and Coloured persons. In 1905, the total number fell slightly to 517, this diminution being entirely the result of a decrease in the number of European patients, the Native and Coloured having actually somewhat increased, the figures being 111 European and 406 Coloured.

The average stay of patients in Hospital was, in 1903, 29·2 days, and the daily average number of patients under treatment 34·9. In 1904, the average stay was increased to 30·6 days and the average number of patients to 44·9; while in 1905, the average stay had again fallen to 29·2 and the daily average number of patients to 41·4. The average number of patients per bed in 1903 was 6·9, and each bed was occupied for 202·2 days; in 1904, the average number of patients per bed was 7·7, and each bed was occupied for 235 days; while in 1905, the figures were respectively, 8·5 and 247·8.

It will be seen that these figures compare fairly favourably with the occupation standard I have mentioned on a preceding page.

In 1903 the staff consisted of 8 nurses and 26 other wholetime officers; in 1904 the staff also consisted of 8 nurses, but only 22 other wholetime officers, while in 1905 the number of nurses was reduced to 7 and the other wholetime officers to 20.

The daily average cost per patient amounted, in 1903, to 6s. 6·2d, in 1904, to 5s. 4·4d. and in 1905 to 4s. 11·8d. It will, therefore, be seen that in this institution steady economies were effected by the Government during 1904 and 1905.

With regard to the Chronic Sick Asylums, as already shown, the number of patients has increased from 573 in 1903, to 845 in 1904, and to 996 in 1905. As, however, the number of beds in these institutions is limited, and any increase impossible, it has resulted that this larger number of patients could only be kept in the institution for a shorter average number of days each.

The average stay of patients was, in 1904, 279·3 days in the Graham's Town Chronic Hospital, and 159·4 in the Old Somerset Hospital. These averages were reduced in 1905 to 255·2 and 142·7 respectively. The shorter duration in stay in the Old Somerset Hospital, as compared with the Graham's Town Chronic Sick Asylum, is due partly to the greater pressure for admissions on the former institution, and partly to the class of cases treated in it being of a less chronic nature than are those in the Albany Asylum.

Naturally, the class of patients treated in these Asylums does not require the skilled nursing necessary in general hospitals, and it is therefore needless to deal with the question of the amount of staff employed in these institutions. A very large number of the cases are not really patients in the proper sense of the word, but are rather paupers and derelicts, for whom it is necessary that the Government shall find a home with a certain amount of nursing attendance, but who, in fact, require but little medical treatment.

The average daily cost per patient in the Albany Chronic Sick Asylum was, in 1904, 1s. 11·7d., and in 1905, 2s. 2·2d. per diem, while in the case of the Old Somerset Hospital, the cost was, in 1904, 2s. 5·9d., and, in 1905, 2s. 1·7d.

The total cost to the State for the upkeep of these three institutions amounted, in 1903, to £22,747 2s. 4d., in 1904, £22,924 0s. 2d., and in 1905 to £21,923 16s. 3d. There has thus been a decrease in expenditure in spite of the increased number of patients treated. With the exception of some comparatively small sums received from partly paying patients, the whole of this expenditure was defrayed from the Public Chest.

The Total Expenditure on the Upkeep of Public Hospitals.

To summarise the total expenditure on the upkeep of all Public Hospitals throughout the Colony, including General Hospitals and Chronic Sick Asylums, but not including Lunatic or Leper Asylums, nor Infectious Diseases Hospitals, the total cost on ordinary maintainance of patients and on new buildings was as follows:—1903, £134,908 6s. 3d.; 1904, £137,291 8s. 7d.; 1905, £139,282 5s. 0d.

Some notes regarding particular Hospitals.

The following brief notes regarding those Hospitals which have been more recently inspected are likely to be of general interest to Hospital Authorities, as furnishing information on many points of importance to Hospital Administration:—

Albany General Hospital.

This Hospital has been frequently inspected, the last time on the 27th April, 1906. It labours under the disadvantage of carrying on its work in old and most unsuitable buildings. Moreover, the system of administration is still conducted on the lines of many years ago. Its Visiting Staff consists of only three Medical Officers, who each receives for his services an annual honorarium of £50, and on these Visiting Medical Officers a large part of the responsibility of internal administration devolves. A Resident Medical Officer is appointed, but the salary he receives is very small, being only £100 per annum, increasing to £250 by yearly increments, with quarters and rations, and he is not, as should be the case, solely responsible to the Board for the whole of the internal administration of the institution.

The Hospital has been unfortunate in that during a number of years past cases of typhoid fever have made their appearance, both among the Nursing Staff and patients admitted for treatment of other complaints. Such unusual incidents may be partly accounted for by the unsatisfactory nature of the buildings, but want of care in the nursing arrangements cannot be entirely excluded. There would appear to be no reason why the administration of this Hospital should not be placed on the basis which is being adopted in the case of at least all the larger hospitals of the Colony, namely, the appointment of a fairly numerous Visiting Staff, consisting of the majority, at least, of the Medical Practitioners of the town, whose position should be purely honorary, and whose duties confined entirely to the treatment of patients and the control of the medical and surgical arrangements of the Hospital. The Visiting Medical Staff should, however, form a Medical Board and appoint one of their number to sit on the Hospital Board of Management, and it should also advise the Hospital Board on matters requiring professional advice. The internal administration should be under a competent young medical man as Resident Medical Officer, who should be generally responsible to the Hospital Board for the internal administration, including both Nursing and Lay Staff, and to the Medical Board for the proper carrying out of the professional work. Under such an arrangement, the Secretary, besides being Secretary to the Board, should be in charge of all the Accounting work and be responsible for independent periodical stock-taking, and work of a like kind.

In this institution, the average cost per patient, which was 7s. 2·01d. in 1903, increased, in 1904, to 9s. 3·14d., but fell again, in 1905, to 7s. 2·95d.

During these years, the annual number of patients under treatment fell from 465, in 1903, to 394 in 1904, but rose again in 1905 to 438.

During the same period, the revenue fell from £4,860 in 1903, to £4,548 in 1904, and £4,540 in 1905. The Government grant has stood each year at £3,250, and the fall in revenue has been mainly due to the decrease in the amounts received from paying patients, which, in 1903, was £942, in 1904, £552 and in 1905, £554.

The ordinary expenditure in 1903 amounted to £4,960, in 1904 to £4,724, and in 1905, £4,570. There has thus been a deficit each year, amounting in the three years to a sum of £306.

It would appear probable that economies could be effected in several directions, and notably in the expenditure on supplies and in the extent of the Nursing Staff.

This institution is fortunate in the possession of a considerable Endowment Fund, amounting on the 31st December, 1905, to the sum of £6,039. If possible, this Fund should be employed towards the erection of new and suitable buildings, in place of those at present existing—a project which, in my opinion, should receive support from the Public Funds.

Barkly West Hospital and Convalescent Home.

This Hospital was last inspected on the 19th January, 1906. The institution has had a somewhat chequered career, having been erected somewhere about the year 1870, under the old Griqualand West Government, out of funds raised by a Poll Tax on the local Natives. The ground on which it is situated appears to be Crown property, and was reserved for the use of the Hospital in 1886. The institution itself was originally run on the principle of a Private Hospital and a Nursing Home by the local District Surgeon, who was solely responsible, financially and otherwise, for the cost and the manner of its maintenance, the Government merely subsidising it on the understanding that Government patients should be treated therein at certain rates. The system, however, was unsatisfactory, and in 1904 a Board of Management was appointed, consisting partly of *ex officio* members and partly of members to be elected annually by the diggers of the Lower River Diggings, subject to the institution being supported by a small amount of public subscription.

The institution was closed during the War, but was re-opened on the 1st June, 1904. It is at present conducted in a fairly satisfactory manner, but its activities have not been great, only 38 patients having been treated during 1904, and 62 during 1905, the daily average number of patients in Hospital being only 4·77 during the seven months of the first-mentioned year, and 3·55 during 1905.

The daily average cost per patient amounted to 5s. 2·27d. in 1904, and to 7s. 7·87d. in 1905.

During the seven months of the year 1904, the income amounted to £594 6s., of which £500 was the Government grant, including £100 brought forward from 1903, and the expenditure was £264 17s. 9d.; in 1905 the income was £648 11s. 3d., of which £400 was the Government grant, and the expenditure was £496 9s. 9d.

It will thus be seen that, so far, the revenue has been considerably in excess of the expenditure, and if the amount of work in the ensuing year continues at the same rate, the whole of the annual Government grant of £400 will not be required. As steps are being taken to provide other Hospital accommodation in the district, it is unlikely that the number of patients of this institution should, under normal circumstances, increase, and it is therefore doubtful if its continued existence will be justified.

Cape Town Free Dispensary.

This institution, until lately carrying on its operations in a small dwelling house in Dorp Street, Cape Town, transferred its work to newly erected premises during the early part of the present year, the new building being formally opened in 1905.

The cost of these new premises with the site on which they stand, has been considerable; £7,136 13s. 8d. having been expended in 1904, and £10,812 7s. 2d. in 1905. This sum includes £2,000, obtained from the Government on loan, the remainder having been collected by public donations and subscriptions, chiefly the result of the munificence of one or two private individuals, supplemented by a Government grant of £2,000.

The new building is excellently designed and constructed, and contains Out-patient Accommodation, Consulting Rooms and Operating Theatre probably of the best and most up-to-date kind of any institution in the Colony. Its situation is perhaps somewhat removed from the centres of industrial population and from any General Hospitals for the reception of in-door patients. As I have in previous reports pointed out, this institution should, in my opinion, constitute an integral portion of the system of Hospital treatment in Cape Town, working in direct touch with the New Somerset Hospital, to which it should act as a feeder and whose Out-patient Department it should virtually constitute.

During 1903, 334 visits to patients in their own homes were made by the Medical Officer of this institution, and there were in all 236 attendances of out-patients. During 1904, the number of visits was 383, and the attendances of out-patients were 12,128, while during 1905, 379 visits were made, and the out-patient attendances were 11,114.

In 1903, the total ordinary revenue was £873, and the ordinary expenditure, £757. In 1904, the amounts were, respectively, £743 and £810; while in 1905, they were £882 and £853. The revenue and expenditure may therefore be considered, one year with another, to practically balance. The Government grant, which up to 1904 was £200 per annum, was increased in 1905 to £250. The permanent Staff consists of a Medical Officer, a Nurse and an employec, the total emoluments of whom amounted, in 1905, to £433.

Queen's Central Hospital, Cradock.

This Hospital was last inspected on the 4th October, 1905, when the administration was not found altogether satisfactory, the general control and supervision of the Board being considered lax and inefficient. The Nursing Staff appeared in excess of the actual requirements of the institution. During 1903, this Staff consisted of

1 Matron, 1 Senior Nurse, 4 Junior Nurses and 1 Housekeeper. During 1904, it was increased by the addition of 2 Junior Nurses, while at the time of the inspection in 1905 it had been still further increased by the addition of another Junior Nurse, the services of the Housekeeper, however, having been dispensed with, the Matron taking over her duties. The Staff on that date consisted of 1 Matron, 1 Senior Nurse and 7 Junior Nurses. This increase of Nursing Staff is remarkable in face of the fall in the number of patients under treatment, which, in 1903, numbered 256, with a daily average of 22 ; in 1904, 270, with a daily average of 25·01 ; and in 1905, 200, with a daily average of 20·79. At the time of the inspection several patients were in Hospital who had been there for excessive periods ; one was found to have been in the Hospital for nearly 12 months.

The financial state of the institution was also found to be unsatisfactory, a number of temporary loans having been raised to tide over difficulties, while a considerable amount of outstanding accounts remained unsettled by the Board, but which up to the date of the inspection had not appeared in the financial statements of the Hospital. On the 31st December, 1905, the financial liabilities of the Hospital amounted to £988 4s. 9d., including a Bank overdraft of £431 18s. 0d., but excluding a loan of £1,500 granted to the Hospital by the Railway Sick Fund, and on which the Hospital is required to pay 4 per cent.

As against these liabilities, the assets amounted to £1,281 14s. 3d. of which sum, however, £868 13s. 2d. consisted of funds in hand for the erection of the new Nurses' Home, then in progress, and from which purpose it could not be diverted.

These figures would not be reassuring were the debt a stationary one, and if the ordinary revenue of the Hospital had been at the time sufficient to meet the ordinary expenditure, but this was far from being the case ; the actual ordinary expenditure on the Hospital for the year ended 31st December, 1903, having amounted to £2,332 13s. 4d., while the revenue was only £2,187 7s. 11d., or a deficit of £145 5s. 5d. During 1904, the ordinary expenditure amounted to £2,911 3s. 0d., while the revenue was only £2,452 8s. 7d., or a further deficit of £458 14s. 5d. Again, during 1905, the actual ordinary expenditure amounted to £2,801 19s. 3d., and the revenue to £2,370 1s. 3d., or a further deficit of £431 18s. 0d.

Of the receipts, in 1903, the Government grant formed £898 11s. 6d., and in 1904 £1,250, and in 1905 £1,375. The ordinary annual grant voted by Parliament in respect of this Hospital is £1,000 per annum, at which sum it has stood for a number of years. But for the Parliamentary financial year ended on the 30th June, 1905, a special grant for maintenance was provided of £250, and a similar amount for the Parliamentary financial year ended on the 30th June, 1906. It will be seen, therefore, that during the last two of these years the Hospital has been receiving special assistance from the Government.

This Hospital had been inspected by the Inspector of Accounts, and defects of accountancy had been pointed out, but at the time of the Medical inspection, improvement had not resulted. In the accounts, items appeared for which no vouchers were produced, one of these being found to be on enquiry a sum paid by the Board to the Colonial Medical Council for the examination fee of one of its Nurses, which hardly appears to be a legitimate payment to be made by a Hospital Board. As a result of this inspection, the Board has taken the administration into more serious considera-

tion; the Nursing Staff has been reduced, and it is hoped that further economies will be effected; otherwise it is certain that the Hospital must be involved in serious financial difficulty. It is very doubtful whether a Hospital on the scale of this institution is necessary for the requirements of the area which it is intended to serve.

Frere Hospital, East London.

This Hospital was last inspected on the 15th May, 1906. The number of patients treated has steadily decreased during the past three years, the figures being in 1903, 657, in 1904, 628, and in 1905, 529, or a total decrease during the three years of 128 patients, or nearly 25 per cent. This decrease has taken place chiefly among European male patients, and especially among those admitted from shipping, due to the much smaller number of vessels arriving at the Port and their shorter average stay. The daily average number of patients has also declined from 35·00 in 1903 to 31·88 in 1905; this decline is not, however, proportionate to the decrease in the number of admissions, because the average length of stay has increased from 19·44 days in 1903, to 22 days in 1905, a circumstance probably due to the fact that the Medical Officers have had a larger number of empty beds at their disposal. The average daily cost per patient in 1903 was 8s. 1·31d., in 1904 it fell to 7s. 7·13d., and in 1905 it rose, curiously enough, to exactly the same figure as in 1903, namely 8s. 1·31d. The ordinary revenue, which in 1903 amounted to £6,421, has steadily fallen, being in 1904, £5,171, and in 1905 only £4,550; this fall has been continuous from all sources except those of the annual Government grant of £2,500, and that made by the Railway Sick Fund Board of £100; the decrease in 1905, as compared with 1903, having amounted from paying patients to £615, from contributions by the general public to £933, and from other sources to £323. In 1903, the expenditure totalled £5,179, leaving a credit balance on the year's work of £1,242; in 1904 it was £4,288, or £883 below the revenue, but in 1905 it amounted to £4,719, leaving a deficit—if we exclude the credit balance brought forward—on the working for this year of £169. No contribution to the funds of this institution is made by the East London Municipal Council, as is the practice in the case of other large hospital centres. On the contrary, the Hospital has to pay Municipal charges for its water and lighting.

From the detailed returns made by the Hospital, it is clear that the management has hardly adjusted itself to the decrease in the amount of work to be done. Instead of the Nursing and Domestic Staff being reduced consequent on the diminished number of patients, the Nursing Staff was increased in 1904 by two Nurses, who are still retained, and the Domestic Staff has remained as in 1903. It is probable that in other connections the administration has also not been curtailed proportionately to the decrease in patients.

The existing accommodation provided by the Hospital for European female patients is both inadequate and unsatisfactory. A scheme for the erection of an additional Ward for this class of patient is at present under consideration.

In the year 1902, owing to complaints made to the Government regarding the internal administration of this Hospital, it became necessary to hold an Official Inquiry into its management, as a

result of which the administration was entirely reorganised by the Board and a Resident Surgeon appointed, who is responsible to the Board for the whole internal control. Since these radical changes were undertaken, the efficiency of the institution has been continuously advancing in a manner creditable alike to the Board and its Staff. At the present time the amendment of its constitution is under the Board's consideration, which, if carried out, should place the administration on a permanently sound footing.

Midland Hospital, Graaff-Reinet.

This Hospital was last inspected on the 1st March, 1906. The previous inspection had demonstrated that the administration of the Hospital was carried out on very old-fashioned lines, it being in charge of a married couple, one being the Lay Superintendent and the other the Matron. The sanitary arrangements were highly objectionable, and cess-pits were in close proximity to the underground water tanks; one of the cess-pits actually ventilated into the operating theatre. The general organisation was defective, the nursing behind the times, and the standard of cleanliness and orderliness thoroughly unsatisfactory.

The outcome of this inspection has been a considerable improvement, the Hospital having been placed, not only in a position of greater efficiency, but considerable economy in the management having been made.

The institution, however, is not at present in a sound financial state, the overdraft at the Bank at the end of the calendar year, 1904, having amounted to £118 17s., and at the end of 1905 to £176 11s. 1d., and it therefore will be necessary for the Board to carefully consider all available means by which an increase of revenue can be brought about, otherwise there will either be a serious shortfall at the end of the present year, or the Hospital will have to curtail its activities.

The number of patients treated in 1903 was 97, at a daily average cost per patient of 11s. 8·03d.; the number in 1904 was 150, at a daily average cost of 8s. 5·94d.; and in 1905, 149, at a daily average cost of 6s. 9·04d. The daily average cost per patient has thus decreased between 1903 and 1905 by 42 per cent.

In 1903, the total ordinary revenue amounted to £1,064, of which £625 was contributed by Government, £200 by the General Public and £239 by Paying Patients. The ordinary expenditure in this year amounted to £1,490. In 1904, the ordinary revenue amounted to £1,656, of which £1,250 was contributed by Government, £98 by the General Public, and £308 by Paying Patients, while the ordinary expenditure was £1,786.

In 1905, the ordinary revenue amounted to £1,878, of which £1,675 was obtained from Government, £95 from the General Public and £107 from Paying Patients, while the Expenditure amounted to £1,507.

There were thus successive deficits during the years 1903, of £426, and 1904 of £130; but in 1905 there was a surplus of £371. But the Government annual contribution is really at present at the rate of only £850 per annum, to which sum it was reduced from the 1st July, 1905, it having been up to that date at the rate of £1,250 per annum. The contributions during 1905 were, therefore, made up by a half-year's contribution at the rate of £1,250 and a

half-year's contribution at £850, making a total of £1,050, together with six months' arrear contribution from 1903, amounting to £625. It will be seen, therefore, that, had the Government's contribution been only at the rate of £850, the year 1905 would then have closed with a deficit of £454, instead of with a surplus. During 1905, considerable economies in the administration of the Hospital had been carried out, and it is, therefore, doubtful if any further substantial reductions can be effected; so that the Hospital, if working on its present basis, must close the present year with a considerable deficit, unless it can increase its revenue from local sources. This it should be well able to do, for, as will be seen, the amount of the contributions received from the Public and from Public Bodies and from Paying Patients, is by no means as great as should reasonably be expected. There is no doubt also that the tariff charges made for Paying Patients are at present inadequate. Therefore, it should be possible for the Board to increase its revenue from local sources, and on general principles it must be admitted that a Hospital serving purely local needs, as does this Hospital, should be required to obtain more than 10 per cent. of its income locally, which was about the portion of the ordinary revenue supplied by the Local Public and Paying Patients together during the year 1905.

Kimberley Hospital.

This Hospital was last inspected on the 15th January, 1906.

During the last three years a large number of new buildings have been erected in connection with this Hospital. The old Female Contagious Diseases Ward has been demolished, and the erection of a new substantial, single-storied building of brick under an iron roof, completed. A new Children's Block has also been added and extensive alterations have been carried out in connection with the Victoria Block; the Native Servants' Quarters have been entirely rebuilt, and a new building has been erected for the Resident Medical Officers by the side of the quarters occupied by the Secretary, which have also been considerably enlarged. A new Dispensary building is in course of erection. In addition an operating theatre of a very fine type has been built. The Hospital is now second to none in the Colony in the character of its accommodation and equipment. The manner of dealing with its waste water and drainage, however, requires improvement.

The institution was found on inspection to be in good order, and the administration in a satisfactory condition. But while the internal administration is satisfactory in result, in system it is not the best. At the present time there are three independent heads, each directly responsible to the Board of Management for different sections of the administration of the Hospital, namely, the Senior Resident Medical Officer, the Matron, and the Secretary. Such a system lacks cohesion, is inco-ordinate, fails in fixing a definite responsibility on any Officer, and sooner or later produces friction between the officials. It has been tried in many hospitals and ultimately always abandoned, as in the case of the Somerset Hospital, in favour of placing one head in general control of the entire internal administration and alone directly responsible to the Board. This head should be the Resident Medical Officer.

The most noteworthy feature in connection with this institution is its exceptionally flourishing financial condition. Taking

the past three years, there has been a considerable surplus of ordinary revenue over ordinary expenditure. Thus :—

	1903	1904	1905	Total.
Ordinary Income ...	£24,928	£25,988	£28,122	£79,038
Ordinary Expenditure...	22,564	20,899	21,800	65,263
Surplus ...	... £2,364	5,089	6,322	13,775

This large surplus is practically due to the fact that the Board derives a very great portion of its revenue from a special "Hospital Tax" on every contract of service of one shilling per month, which is levied under the provisions of Section 3 of Proclamation No. 2 of 1874, of Griqualand West. This tax has of late years been steadily increasing.

The main sources of the revenue are derived from (a) this Hospital Tax, which in 1903 amounted to £8,316; in 1904, to £9,150 and in 1905 to £11,911. From (b) Government contributions and payments, which year by year remain fairly steady in amount. They consist of the annual grant of £6,100; an annual allowance of £836 in lieu of prison labour and for treatment of paupers; and payments for the treatment of Contagious Diseases patients sent in by Government, based on a charge per patient per diem, and amounting in 1903 to £2,805; in 1904 to £2,061 and in 1905 to £2,313. The total Government payments, therefore, approximate to a little over £9,000 per annum. From (c) public subscriptions which amount to from £1,500 to £2,000 per annum. And from (d) receipts from paying patients amounting each year from between £5,000 and £5,500 per annum.

In the past the Board has with commendable foresight expended a considerable proportion of its annual surplus from ordinary revenue, on the erection of new buildings and in making general improvements, the sums so expended having been in 1903, £4,809; in 1904, £5,782, and in 1905, £4,986. But there appears to be little need for any further large expenditure in this direction in the immediate future. Nor are the needs of the district as far as hospital accommodation is concerned likely to increase much.

The Board is already in possession of a very handsome Reserve Fund amounting to £12,038, of which £4,315 has been derived from legacies and special gifts placed towards an endowment, and the remainder saved from current revenue. This fund produces an income of between £600 and £700 per annum.

The question therefore arises as to whether the contributions from the public chest are not in excess of the needs of this institution.

Victoria Hospital, Mafeking.

Last inspected on the 24th January, 1906.

The Hospital generally was found to be in a satisfactory condition. The Nursing Staff consisted of only one less than in 1903, although the daily average number of patients treated in 1905 amounted to only 5.46, as compared with 12.90 in 1903. A part, however, of the nursing was formerly done by the Ward Attendants, who have also been reduced, so that the reduction of the Nursing Staff is greater than at first appears. The Medical Inspector considered that a further reduction of at least one Nurse and one subordinate domestic employee could be made without impairment

of efficiency. But since the date of his inspection the number of patients has increased and the question is therefore held in abeyance.

The subscriptions from the Public in 1903 amounted to £394, in 1904 to £251, and in 1905 to but £128. Coincidentally, the amounts received from Paying Patients and other sources has also greatly diminished. In 1903 the ordinary revenue amounted to £2,679 and expenditure to £2,383; in 1904 to £1,618 with an expenditure of £1,871, and in 1905 to £1,295 with an expenditure of £1,231. During these years the average cost per patient was during 1903, 10s. 1·5d., in 1904, 12s. 3·6d., and in 1905, 12s. 4·1d. The Government Grant during the last two years has been £750 per annum, supplemented in 1904 by an Extraordinary Grant of £125, and in 1905 by one of £250. I am of opinion that the Grant of £750 per annum should be ample while the work of the Hospital remains at its present level.

Royal South-Western Hospital, Oudtshoorn.

Last inspected on the 6th March, 1906. The inspection showed a very satisfactory improvement in the management of this Hospital during the past year, on which the Hospital Board and the Medical Staff are to be complimented.

On comparing the working of this Hospital during the three years 1903, 1904 and 1905, it will be seen that its activities have greatly increased during the last of these years. Whereas only 99 in-patients were treated in 1903, and 92 in 1904, 163 were treated in 1905. This increased amount of work is due to the fact that the Hospital in the interval has been re-organised and placed upon a wider basis, the whole of the Medical Practitioners in the town being appointed Visiting Medical Officers. Together with this altered arrangement, the Board of Management have been able to obtain greater efficiency and very considerably increased economy. The average daily cost per patient, which in 1903 was 9s. 1·78d., and in 1904, 10s. 6·24d., fell in 1905 to 6s. 11·88d., this reduction being more or less an all round one in the general administration, but chiefly gained in the matter of salaries and provisions. In spite of this reduction, however, the expenditure has necessarily increased, coincidently with the augmentation in the work, having risen from £1,156 2s. in 1903 and £1,193 0s. 8d. in 1904, to £1,397 8s. 4d. in 1905. The ordinary revenue during 1905 was £1,126, there being thus a deficit in the year's working of £271. During 1904, there was also a deficit of £206, but on the 1903 working there was a small surplus of £32. On the 31st December, 1905, the Board had a Bank overdraft of £273 1s. 4d., although against this, sums amounting to £385 10s. were owing to the Board at the end of the year.

As it is probable that some further increase of patients will accrue in the future, but it is unlikely that the average cost per patient will be very materially reduced, it may be expected that the expenditure for 1906 will not be less, and may possibly be more, than that of 1905. It is clear, therefore, that it will be necessary for the Board to make stronger efforts to increase their ordinary revenue, and this, I understand, they have every expectation of doing, in the shape of contributions from Local Bodies in the neighbourhood. In 1903, the revenue included £502 1s. 10d. from the Public, in 1904, £266 14s. 11d., and in 1905,

£417 6s. 4d. Of the last mentioned amount, £100 was a subscription by the Divisional Council of Oudtshoorn, and it is hoped that this sum will be increased, and also that neighbouring Local Authorities, whose inhabitants benefit by the Hospital, will also contribute. Larger contributions from Paying Patients might also be expected, and in this manner the Hospital should be able to maintain itself on a sound financial basis without having to seek increased support from the Government. During 1905, although 69 European patients were treated, only £89 was received from Paying Patients.

This Hospital possesses an Endowment Fund of £2,200, which, however, cannot be used for ordinary revenue.

Frontier Hospital, Queenstown.

Last inspected on the 13th October, 1905.

During 1903, 270 patients were treated in the institution; in 1904, 230, and during 1905, only 172. The daily average number of patients under treatment in 1903 was 29·00, in 1904 19·8, and in 1905, 20·00, the daily average having evidently been kept up during 1905 by keeping patients longer under treatment, as is evident from a consideration of the average duration of treatment per patient, which in 1904 was 31·6 days, and in 1905 42·4 days, or 34 per cent. longer than in the previous year.

The Nursing Staff, which consisted of eight in 1903, was increased to nine during 1904, and remained at that strength for the greater portion of 1905, although the number of patients had so greatly declined. As a result, however, of the last inspection, it is understood that a considerable reduction in the Nursing power of the Hospital has been effected.

The revenue of the institution has been seriously depressed by the falling off of fees from Paying Patients. In 1903, the revenue of the institution amounted to £3,152, and the expenditure to £3,513, there being a deficit on the year's working of £361. In 1904, the revenue was £2,850 and the expenditure £3,130, a deficit of £280, and in 1905, the revenue was £2,686, while the expenditure amounted to £2,779, giving a further deficit of £93. Thus, in the three years, the ordinary expenditure has exceeded the ordinary revenue by £734. The Government annual contribution is £1,250.

This institution pays its Visiting Medical Officers liberally, each of the two receiving an annual honorarium of £105. I am given to understand that recently, as a result of the last inspection, these honoraria have been somewhat reduced, but the staff would be acting in accordance with the usage elsewhere if they relinquished these allowances altogether.

Vryburg Hospital.

Last inspected on the 12th January, 1906.

This Hospital was erected by the Bechuanaland Administration in 1889, and when the Protectorate became incorporated with the Colony, in 1895, the Hospital was handed over to a Board of Management. The Board, however, proved unsatisfactory, and the administration was resumed by the Government. Early in 1905, the Hospital was again placed under a Public Board, which assumed office on the 1st March of that year.

The last inspection did not find the general administration very satisfactory, but allowance must be made for the short period

that the Board had been in office. The average daily cost per patient in 1905 had amounted to the very excessive rate of 25s. 3·39d. This is a cost which, if it continue, must, *ipso facto*, condemn the institution.

The ordinary revenue of this Hospital during the last ten months of the calendar year 1905, when it was under the control of the Board, amounted to £1,261, of which the Government contribution actually paid during the period was £1,166, but the annual contribution is at the rate of £1,400. The ordinary expenditure for the whole of the same year was £1,303, for which sum a total of 53 patients were treated, 37 of these being Europeans and 16 other than European ; the average total cost for each patient for maintenance and treatment amounting, therefore, to the enormous sum of £24 11s. 9½d. When it is considered that the Government contributes approximately £23 of this amount, and that of the patients treated only seven were free, the remainder being paying or contributing, it will be at once obvious that the Government is paying a considerable sum on behalf of persons many of whom should, under ordinary circumstances, be expected to pay for the whole of the cost of their treatment.

The charge made for paying patients is, in the Private Wards, 12s. 6d. per diem, in the General Wards, 7s. 6d. per diem, while members of the Cape Police and European employés of the Cape Government Railways pay 5s. per diem, and Native employés of the Railway, 3s. per diem.

Under all the circumstances, I am inclined to doubt whether the continuance of this Hospital is really necessary. Certainly at the present rate of cost, its existence is not warranted, especially as, if abolished, use could be made of the Mafeking Hospital.

7. GENERAL.

The Public Health Laboratory.

During the two years under review, the Laboratory attached to this Office, and over which Dr. G. W. Robertson, the Bacteriological Assistant, so ably presides, has performed a large amount of work of much value to Public Health and to Medical practice in the Colony. His report will be found printed on page A.—3, Annexure "A," of this Report, wherein the particulars of the work are given.

This consisted of bacteriological examinations in connection with outbreaks of disease, the systematic examination of rodents from Plague-infected and other areas, the examination of pathological specimens, mainly for the guidance and at the request of Medical Practitioners, Medico-Legal work, the manufacture and issue of Calf Lymph, together with a number of other matters, important but not necessary to particularise.

Examination of Rats.

One of the most important matters of a routine nature is the examination of rats for Plague infection. This duty has for years past been carried out very systematically in connection with the Cape Town Docks and shipping in the Bay, and during 1905, 20,750 rats were examined from this source. Owing, however, to the fact

that the cost of trapping rats fell entirely on this Department, and amounted to a very considerable sum, between £50 and £70 per month, it has been necessary in the interests of economy to discontinue payments from the Plague Funds, from the 31st March last, and from that date we have been dependent upon such rats as may be caught by the officers of the Harbour Board; these, however, do not number many, and it is a question whether they will afford a sufficient check on the state of health of the rat population. This work owes its importance to the fact that it is the only reliable means by which the administration is placed in a position to obtain immediate evidence of the presence of Plague-infection should it arise within the port, an event which, owing to the constant and direct communication between this port and infected ports in other parts of the world, is liable to take place at any moment.

It is also our aim, for the same reason, to examine rats from all other parts of the Colony, but I regret to say that, although representations have been frequently made to Local Authorities on this subject, very few ever transmit rats to the Laboratory for examination.

Pasteur's Anti-rabic treatment.

Another important work of the Laboratory is the maintenance of the means of carrying out at short notice Pasteur's Anti-rabic Inoculation. For this purpose it is necessary to secure the death by rabic inoculation of a sequence of rabbits each week, the spinal cords of these being removed, dried and prepared, so as to maintain a series of cords ready for the purpose of carrying out the inoculation, by the method of gradual intensification of dose, of any persons bitten by a rabic animal, who may present themselves. During 1905, one such person was sent to the Laboratory from German South West Africa by the German Government and was duly inoculated, and, recently, two other persons bitten by a supposed mad dog have been sent from the same place to undergo the operation.

At the present time rabies exists in Rhodesia and it is not improbable that the disease will gradually travel south to this Colony.

During 1904, 62 rabbits were inoculated for this purpose, and during 1905, 77.

The Testing of Disinfectants.

Another very useful work recently undertaken in the Laboratory has been the testing and standardising of disinfectants. On this subject Dr. Robertson has, in conjunction with the Laboratory Assistant, Mr. Walter D. Severn, F.C.S., prepared a paper of great interest, based upon their work and which will be found printed on page A—8 of Annexure "A." The method adopted in the examination of disinfectants is, with modifications, that devised by Drs. Rideal and Walker, and furnishes a nearly exact means of standardising and certainly an exact means of comparing the relative effective value of one disinfectant with another. On page A—15 of the Annexures will be found a Table, giving the results obtained by this method in the case of a number of well-known disinfectants on the market. On my recommendation the Government has recently required that tenders for disinfectants be based on this standard of a carbolic acid co-efficient, with the result that it has now for the first time

become possible to make an accurate comparison of tenders, so as to decide with absolute equitableness between the relative merits of different tenders and to choose with certainty that which will prove most advantageous to the Government.

Pathological Museum.

In the course of the work of the Laboratory, medical men have from time to time brought up specimens for examination, many of which were of considerable interest, a fact that suggested the idea that in the Colony a very large amount of valuable pathological material, especially in connection with the larger Hospitals, was being wasted. In consequence, it was decided to ascertain whether the co-operation of medical men generally could not be enlisted in the collection and preservation of such specimens in the form of a Museum to be established in this Office, and, accordingly, on the 20th October last, I addressed a Circular Letter, a copy of which will be found printed on page A—16 of Annexure "A," to all Medical Practitioners and to all Hospital authorities throughout the Colony. I am pleased to be able to state that the result has exceeded our expectations, and that a commencement—indeed a solid foundation—has been made in the formation of a Pathological and Biological Museum, which already contains specimens, many of which would be an acquisition to some of the old-established Museums in Great Britain. I have no doubt that before long a very valuable collection will thus be brought together.

The Closure of the Grahamstown Bacteriological Institute.

On the 1st of July, 1905, the Grahamstown Bacteriological Institute was closed as far as concerned its work in connection with human diseases, Dr. Edington, the Director, having retired from that date and the Veterinary portion of the work being taken over by his late assistant, Mr. Thomas Bowhill. This change resulted in a considerable increase of work in the Laboratory attached to this Office by reason of the transfer of that portion of Dr. Edington's work, consisting chiefly of bacteriological and pathological examinations, some Medico-legal work, and the preparation of Calf Lymph. As a result it was found necessary to increase the Staff of this Laboratory by the transfer from Grahamstown of Mr. Walter Severn, the Chemistry Assistant hitherto employed in the Grahamstown Institute, and this gentleman has been of great help in the conduct of the work under the direction of Dr. Robertson.

Manufacture of Calf Lymph.

Owing to the absence of any suitable accommodation in which to stable calves and to carry on the preparation of Calf Lymph, it was found impossible to immediately undertake this work in its entirety, and, therefore, recourse had to be made to the Transvaal Government, which generously consented to assist this Colony until such time as we were able to carry on the work for ourselves. This arrangement has been of material use to the Department, but has necessarily resulted in a considerable expenditure, although the Transvaal Government has been supplying us with the Lymph at a very moderate rate. This expenditure would have

been greater had we not been enabled, by the assistance of Mr. W. Robertson of the Veterinary Branch of the Agricultural Department, to manufacture a certain quantity of lymph for ourselves.

The Government has placed a small sum upon the Estimates for the ensuing financial year, with which it is intended to erect suitable stables and adjuncts on ground at Rosebank owned by the Government, and it is, therefore, hoped that, before long, we shall be able to manufacture in sufficient quantity to supply all our needs.

Issue of Curative Sera.

The Laboratory has continued the issue of supplies of curative sera at cost price for the treatment of those able to pay, and free for that of paupers. The chief issues have consisted of diphtheria Anti-toxin, but issues of Anti-tetanus serum, Yersin's serum, Anti-streptococcus serum and Anti-venine for snake-bite, have also been made. With regard to the latter, although small supplies have been stationed with Magistrates in different parts of the Colony, it has always happened, as must inevitably be the case, that the supply of venine and the person bitten have never been in the same locality, and as the action of the poison is rapid, there is never time to procure it.

At a recent inquest investigation at Goekap in Namaqualand, in March of this year, some curious facts were disclosed in a case of death from snake-bite. A boy, aged nine years, was out herding his parent's stock on the 27th of that month. At sundown, after driving home the stock, he went into the house, washed himself, and then sat down outside and commenced crying. Questioning only elicited the statement that he had been bitten by a mouse; that while going along he had seen a mouse running in and out of some holes in the ground, and wishing to catch it he stuck some mat reeds into the hole in which the mouse had last disappeared, and while doing this he felt he was stung by something. There was a mark of a bite between the palm and the wrist. His arm was soon much swollen and he rapidly developed serious symptoms, dying between 8 and 8.30 p.m., apparently in less than an hour after being bitten, and while remedies were being administered to him by his parents. These remedies were various and such as might have been prescribed in the middle ages; one consisted of the dust ground from a sixpence mixed with milk and salt.

On searching the veld next morning, the spoor of the boy was found and, on being followed up, led to the place where he appeared to have been bitten, two mat reeds being found sticking out of a mouse hole. Here the friends dug up the ground and disclosed a cobra snake 3 feet long.

Malta or Mediterranean Fever.

From time to time during the years 1904 and 1905, blood examinations for the detection of Malta Fever have been submitted to the Laboratory, chiefly sent by Dr. Strachan of Philipolis in the Orange River Colony. In a number of these cases positive results were obtained by the agglutination test with cultivations of the *Micrococcus Militensis*. It is doubtful how far this disease may actually prevail in the Colony, although it appears certain that cases do occasionally occur. During the late war several of the

Military Medical Officers, more particularly acquainted with the disease, came to the conclusion that many of the so-called cases of Typhoid which they had to treat were really cases of Malta Fever. There is every probability that at any rate some of the cases which occur epidemically in Kimberley, where they are known as "Camp Fever," and in Graaff-Reinet, where they are spoken of as "Typho-Malaria," and in other places in the Colony, are really examples of this disease. If this prove to be the case, it will serve to explain many of the difficulties of diagnosis which have met Medical Practitioners in the past when dealing with cases of supposed Typhoid Fever of an atypical character.

If the disease be found to prevail in this Colony, it will become a question as to how far it may be spread by goats, as has recently been proved to be the case at Malta by the researches of the British Commission appointed for the investigation of Mediterranean Fever.

The whole subject in this Colony is one demanding further enquiry, and in this connection it may be mentioned that Dr. Robertson is always ready to make any tests or examinations of blood which may be forwarded to the Laboratory, and it is hoped that Medical Practitioners will assist in the enquiry by availing themselves of these opportunities.

Port Health Work.

During the two years under review a large amount of Health work has been carried out in connection with shipping and the immigration of passengers at the different Ports of the Colony, notably at the Ports of Cape Town, Port Elizabeth and East London. This work is directly under the administration of the Medical Officer of Health for the Colony and the Port Health Officers have to report to him on all matters relating to it.

Formerly this work was carried out in a more or less perfunctory manner by the several Port Health Officers, the bulk of it, indeed, being performed by the Boarding Officer or other lay official, with the result that there was very little control over the entrance into the Colony of infected persons or things, and on several occasions regrettable results ensued. At the present time, unless unavoidable circumstances prevent it, the Port Health Officer at every Port is required to board the vessel in person, and is only to grant free pratique on being duly satisfied that the health of those on board warrant this action.

During the two years under review no circumstance of note in connection with this work has taken place. On Page A—17 of Annexure "A." will be found a special report by the Additional Port Health Officer, Table Bay, who is also Medical Officer to the Harbour Board, whose duties are somewhat more extensive than those at the other Ports, owing to this being usually the first Port of call of vessels arriving at the Colony.

Importation of Second-Hand Clothing.

In connection with the occurrence during 1905 of Cholera in Russia, Galicia, and Germany, along the watershed of the Vistula, the question of the possibility of the introduction of the disease into South Africa, by means of the importation of second-hand clothing, was raised by the Pretoria Chamber of Commerce.

It is, however, unlikely that this disease would be introduced into South Africa by this means, but it is quite possible that other infectious diseases might be conveyed by the introduction of second-hand or cast-off clothing.

We are all of us familiar with the variety of old garments worn by the Native, but few of us, I think, have been aware of their origin, and the extent to which the trade in imported second-hand clothing is carried on.

Although the greater part of such imports consists of cast-off military and civilian garments, there is no doubt that a certain proportion of it is made up of the wardrobes of deceased persons who may have died of infectious disease. Moreover, it is certain that much of the clothing is collected by, and passes through, hands under conditions by which dirt and infection may be gathered, and it is, therefore, desirable that measures should be taken at South African Ports of Entry, by which the freedom from infection of such garments may be ensured. It is true that the importers state that they are "supposed" to have been cleaned and disinfected before being shipped, but it is evidently necessary that some reliable proof of this having been done should always be forthcoming.

Owing to the fact that in all instances Customs entries of new and second-hand clothing have not been kept distinct, it is difficult to obtain exact statistics on the subject, but by the courtesy of the Controller of Customs, I have been supplied with the following particulars regarding this trade :—

During a period of five or six months, there are records of the importation through the Ports of Cape Town, Port Elizabeth and East London, of 41,364 cast-off garments, together with 101 bales and 63 cases, the numbers contained in which are not ascertainable. The value of these imports in most instances has not been procurable, but, basing an estimate on such information as has been furnished, it would appear probable that the value of the second-hand clothing annually imported through the three Ports of Cape Town, Port Elizabeth and East London amounts to at least £30,000 ; the greater portion of this passes through East London, and the Importers include many firms of high commercial repute.

The places from which the goods are chiefly derived appear to be London, Manchester, Paris and Berlin, and their chief places of destination are Johannesburg and the Transvaal, Kimberley, Queenstown, the Transkeian Territories, Orange River Colony, Basutoland and Rhodesia. The garments are almost entirely destined for sale to Natives.

They consist mainly of overcoats, (chiefly military, but also many dust coats,) trousers, and riding breeches, (many of these khaki and cast-off military clothing,) jackets and waistcoats, together with some boots. There appears to be practically no second-hand women's clothing imported.

It seems that the bulk of the clothing is shipped in bales which have been subjected to hydraulic pressure and bound with hoop iron, a small proportion being sent over in cases lined with oil paper. It would, therefore, not appear feasible, by steam or any other means, to disinfect at our Ports without first completely unpacking the goods. The majority of Importers at the Ports, however, appear to send forward goods without breaking bulk, and would, therefore, be inclined to resent any process which compelled the breaking up of the original packages.

I am of opinion that every consignment of second-hand clothing entering the Colony, no matter where from or where it is consigned, should be declared to the Customs, and full particulars furnished at the Port of Entry, and that, unless such consignment is accompanied by a sufficient certificate furnished by a responsible Health Authority at the Port of shipment or at the place of origin of the package, certifying that the garments contained in the package have been thoroughly disinfected and cleansed to the satisfaction of the Authority, and a further Certificate be forthcoming that such package has not since been opened or tampered with, all such consignments should be subjected to disinfection at the Port of Entry by the Colonial Government. I may add that, at the three main Ports of Cape Town, Port Elizabeth and East London now exist large Steam Disinfectors, through which the majority of such goods could be passed rapidly and without deterioration.

The Examination of Foodstuffs at the Ports.

An attempt has been made to exercise some control over the importation of foodstuffs through our ports, but, unfortunately, owing to lack of powers and the impossibility, with the means at present available, of effecting a workable system, it has been found difficult to carry out. Nevertheless, a not inconsiderable amount of such foodstuffs have been subjected to examination, especially at the port of Cape Town, and when found unfit for food, destruction has followed. Dr. McLaren, in his report above alluded to, gives the particulars in regard to the port of Table Bay.

Owing to recent statements regarding the conditions obtaining in the American meat packing industry, special attention has been paid to tinned meats, but only a small proportion of tins have been found "blown" or damaged and their contents unfit for food, excluding, however, the case of certain large quantities of tinned meats, part of condemned military stores purchased by certain traders in the Transvaal and Natal, and by them attempted to be passed through the ports of this colony for sale to the public. These latter consignments also included large quantities of jams, of which, on one occasion alone, we destroyed 1,483 cases or 71,184 tins.

Under the provisions of Section 21 of "The Sale of Food and Drugs and Seeds Act, 1890," a vigilant watch is now kept by the Controller of Customs on importations of food and liquors, so far as they are affected by the provisions of the Act, which, however, only deals with the matter of adulteration, and not with the question of soundness or fitness for human food. By adulteration is merely meant that the article does not conform to the description given of it on the label of the receptacle in which it is contained, or to that furnished by the invoice. Nevertheless, although these powers are very limited, a great amount of good has been effected, more especially by stopping the importation of many different brands of condensed milks, really consisting only of a preparation of what is left of milk after thorough machine skimming has been effected, and of so-called preserved creams, which were really not milk fat, but only condensed milk reduced to the consistency of a cream.

As a matter of fact, the powers are very nebulous under which the Department has generally acted in the matter of food inspection and condemnation at the Ports, and it is of great importance

that adequate legislative provision should be made, so as to afford the Government proper powers to deal with the subject, which to a country importing, as does this Colony, such a large proportion of its foodstuffs, is one of vital consequence. It is also one which directly affects the inland Colonies, importing food supplies through our gates, as inspection can only be adequately performed at the sea ports.

Congress of Medical Officers of Health for the several South African Colonies.

From what has gone before, it will have been seen that great need exists for the establishment of a system under which the Central Health Administrations of the several Colonies are brought into closer touch with one another, both as regards the exchange of information and the taking of joint measures for dealing with matters of Public Health directly affecting more than one of the Colonies. Recognising this need, the Colonial Government approached on the subject the other South African Colonies, through His Excellency the High Commissioner, suggesting that, as a step towards such an arrangement, a Conference of the Medical Officers of Health of the several Colonies might be held, at which subjects affecting common interests could be discussed and which could bring up recommendations to the several Governments. This proposal received the unqualified approval of all the other Colonies, and it has accordingly been arranged for such a Conference to meet in Cape Town in November next.

This is a most important step forward, as some of the questions affecting the conservation of the Public Health more imperatively demand confederated action than do most other questions of general Government ; indeed, probably, more so than any other subject, if we exclude those two most important matters of Native Administration and the fixing of Tariffs.

Native Abakweta and Borwera Rites.

In view of the increasing prevalence of syphilis and other communicable diseases among the Natives, it would appear necessary that steps should be taken to regulate the performance of the act of circumcision, which forms the essential fact round which the rites, known as Abakweta in the Native Territories and the Borwera in Bechuanaland, centre. This operation is generally performed on a number of lads at the same time, the same knife or small assegai (called Irwana) being used for the purpose, so that blood from one individual operated upon is inoculated into the others, and it is quite possible that by this means syphilis and other communicable diseases may be spread.

During the Borwera rites which were carried out in May, 1905, on a somewhat extensive scale in the District of Taungs, it is estimated that 900 youths took part, there being also a large number of guards who accompanied the novices to keep off strangers, access to the lads during the continuance of the rite being jealously prevented. In connection with the performance on this occasion, it was reported to the Government that a large number of deaths of boys had occurred, but on careful enquiries made by the police it was ascertained that only nine deaths had taken place. At first it was believed that the deaths had been caused by syphilis,

but, as far as it could be ascertained, it was eventually thought that the deaths were due to "chest complaints," contracted during the period that the boys remained out at nights in the open, without any other protection from the wind than that afforded by scherms of thorn bushes. The weather at this time was unusually severe, and frosty nights prevailed. The District Surgeon reported that on this occasion he was aware of Syphilitic patients having attended the ceremony, and in two instances such patients had sent to him for medicine for the disease. It was impossible to obtain full information regarding the true facts of this occurrence, as the presence of any, except the actual participants in the rite, is not tolerated. So much is this the case that even the Magistrate and others intimately acquainted with the Natives are uncertain as to the actual ceremony that takes place, and to such an extent is interference resented that the authorities have on occasions had to abstain from executing a warrant for the arrest of a criminal at the time he is undergoing the ceremony, owing to the probability of thus creating a dangerous disturbance.

It is difficult to see how it is to be accomplished, but it is clear that some sort of control should be exercised over the manner in which the rite is carried out, and especially in order to ensure that cleanliness and measures for the prevention of the conveyance of disease are adopted.

The Public Health and Municipal Bills.

During the course of this report, I have had to refer many times to the necessity for increased or amended powers for dealing with the matters reported on, and have described the provisions inserted for the purpose in the draft Public Health Bill. This Bill, prepared now some two years and a half ago, has up to the present not materialised. It was drafted in conjunction with a Bill dealing with general Municipal government, the two forming twin measures which, if they became Law, would at once place both Municipal government and Public Health administration on a very much better basis than at present is the case. The measures were submitted to the South African Mayoral Congress held in Pietermaritzburg in 1905, and again to the Association of Municipal Corporations of Cape Colony, which held its meetings at Kimberley in 1906. At both of these Congresses the Health Bill was considered and many of its provisions were taken exception to, mainly on the ground that they provided powers to the Central Authority for guiding or restraining the action of Local Authorities. With regard to the Municipal Bill, a prodigious number of amendments has been proposed.

As one who is largely concerned in the work of conserving the health of the Colony, I cannot but hope that these measures, and more especially the Public Health Bill, will, before long, receive the attention of Parliament.

The Staff.

I cannot conclude this report without a reference to the extent of the services rendered in the Public Service by the Medical Officers connected with this Office. I have already mentioned the admirable work done by Dr. G. W. Robertson, in the Public Health Laboratory, in addition to which he performs a considerable amount

of work connected with Leprosy, Small-pox and the making of medical inspections, which is properly outside his province. Acknowledgment is also due to Dr. Mitchell, the Assistant Medical Officer of Health, for the quantity and the quality of the work which he has rendered without stint. This Officer was, on account of urgent private affairs, absent from the Colony from September, 1905, to May, 1906, and during his absence Dr. E. N. Thornton acted in his place. Dr. Thornton has rendered valuable services through a number of years, both in connection with Plague and the performance of work at the Head Office. To him I owe special thanks for great assistance in the preparation of this report. Mention must also be made of three officers who perform work connected with this office, namely, Dr. J. P. MacLaren, Additional Port Health Officer, Table Bay, and Drs. D. C. Rees and J. Barcroft Anderson, the services of the two latter, first employed in connection with Plague, are now retained in the capacity of permanent District Surgeon and Port Health Officer, the first mentioned at Port Elizabeth, the other at East London, continuing, however, in charge of Plague operations.

In an earlier page of this report I have referred to the extent of the work performed by the Clerical Staff, and have alluded to the difficulties under which this work is performed. It is certain that, were it not for the ungrudging spirit in which every man of this Office works, and voluntarily performs duties after office hours, many of which do not properly fall to his share, the Department could not cope with its responsibilities.

I have the honour to be,

Sir,

Your obedient Servant,

A. JOHN GREGORY,

Medical Officer of Health for the Colony.

ANNEXURES.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "A."

No. I.

REPORT OF THE BACTERIOLOGICAL ASSISTANT.

To the Medical Officer of Health for the Colony.

I have the honour to submit herewith, a resumé of work carried out in the Public Health Laboratory, during the two years ending 31st December, 1905.

There is evidence of a steadily growing tendency on behalf of the medical practitioners to avail themselves of the assistance of the Pathologist and Bacteriologist, either to help in arriving at a correct diagnosis in many obscure cases of disease or to confirm the conditions previously diagnosed. So much has this been the case that, in October, 1904, it was found desirable to draw up a short tariff of charges for such work carried out in the Public Health Laboratory. This tariff was somewhat extended in May last, so as to cover more ground, seeing the work was rapidly increasing both in quantity and extensiveness.

Up to the present quite seven-eighths of the examinations have been conducted free of charge for medical practitioners and hospitals in the Colony, but, as additional assistance became necessary to cope with the increase in work, it has followed, in order not to put an undue burden on the Public Revenue, that a small charge had to be made to cover working expenses.

All diagnoses and examinations required for Public Health purposes and all departmental work are still conducted free of charge, while half tariff rates only are charged when the specimens are from non-paying patients in any Government-Aided Hospital. Consequent, upon the transference from the Bacteriological Institute, Graham's Town, of all medical diagnostic work to the Public Health Laboratory, it became necessary to enlarge our accommodation by the addition of two other rooms, one of which is used for the Chemical and Bacteriological work connected with water, sewage and milk examinations, and the other as a temporary home for Pathological specimens.

A circular letter was sent to all members of the medical profession in October, 1905, regarding the formation of a nucleus of a Pathological Museum, where specimens might be collected and preserved for future reference, it being recognised that much valuable material was being wasted owing to the absence of a collecting centre.

The response to this request for specimens has been exceedingly liberal, both in the matter of Pathological specimens and promises of assistance, and I hope that in the near future our nucleus will increase sufficiently to deserve more suitable accommodation so that the specimens can be better seen, and made more accessible to the members of the medical profession. The specimens received have been many and various (during the past six months over 150 have been added); all were welcome, and a number are unique and of great pathological value.

In a short time, I hope to have a catalogue prepared, containing notes and a short clinical history of each specimen, so that any Medical Practitioner can inspect and study the collection.

In connection with the Pathological Museum, I should feel obliged if the various medical practitioners interested in the movement would forward all specimens as soon after removal as possible; if this is done in accordance with the instructions issued along with the tariff of charges, it is often possible to preserve to a certain extent some of the colours of the tissues. At present we lack specimens of the various intestinal parasites met with in this Colony. The most suitable media to send worms, flukes, etc., is in a 1 in 20 solution of Carbolic Acid.

I have to express my thanks to Mr. W. D. Severn, F.C.S., A.R.C.S., and Mr. H. Bailey, who by their co-operation have done their utmost to facilitate the general work of the Public Health Laboratory.

Specimens Examined during the Years 1904 and 1905.

	1904.	1905,
Rats from Cape Town Docks and Harbour Board Area ...	15,628	20,750
Rats from other sources ...	241	217
Rats found Plague-infected ...	48	38
Mice ...	53	46
Mice found Plague-infected ...	24	4
Cats ...	4	8
Cats found Plague-infected ...	2	8
Other Animals ...	6	1
Other Animals found Plague-infected ...	Nil	Nil
Animals examined for Rabies ...	0	1
Sputum for Tubercle ...	134	173
Swabs or membrane for Diphtheria ...	17	16
Blood from cases of suspected Typhoid ...	31	28
Blood from cases of suspected Malta Fever ...	15	1
Blood for Malaria parasites, &c. ...	5	18
Water Samples (Bacteriological Examination) ...	58	50
Milk Samples „ „ ...	1	0
Sewage Samples „ „ ...	5	2
Stomach Contents ...	0	7
Urine ...	65	73
Faeces „ „ ...	0	1
Tissues, Tumours, &c. ...	115	127
Intestinal Parasites ...	0	1
Leprosy ...	184	180
Actinomycesis... „ „ ...	1	1
Material from suspected Plague cases ...	37	62
Medico-Legal cases „ „ ...	25	14
Rabbits inoculated for Anti-Rabic Virus ...	62	77
Disinfectants examined „ „ ...	3	14
Post-Mortems attended „ „ ...	203	170
	16,967	22,088

It will be seen from the above list of specimens examined that a large amount of work has been entailed by the examination of rodents and material for the presence of plague bacilli. No plague infection was found during the two years **under** consideration in **any** of the rats caught or found dead in Cape Town Docks, Harbour Board Area, or in Shipping in Table Bay, although over 36,000 were examined. The specimens showing plague infection came from the recognised plague centres in the Eastern Province.

In Cape Town, and on board vessels in Table Bay, a number of clinically suspicious buboes have been investigated for the presence of Plague Bacilli, but all, on microscopic examination, gave negative results, and on carefully going into the circumstances connected with these cases it has, as a rule, been possible to ascribe the presence of the buboes to non-plague causes.

During 1905, both at East London and King William's Town, an exceptional mortality occurred amongst cats, and eight sent to the Laboratory were found, upon microscopic examination, and by inoculation of material into susceptible animals, to be suffering from Plague. In more than one case, I believe, plague infection was shown to have been conveyed to children who fondled their sick pets.

It was noticed at Port Elizabeth and East London, that after an excessive plague mortality amongst rats, that many mice, both those killed, apparently healthy, and those found dead, showed on microscopic examination of smears from spleen, glands, etc., bacilli strongly resembling *B. Pestis*. In some cases emulsions from the organs of the found dead mice produced typical plague in inoculated animals, while at other times no apparent results followed from inoculation. Unsuccessful attempts to increase the virulence of those plague-like organisms, which did not kill on inoculation, were made in many cases, but owing to the advanced state of putrefaction, in which most of the specimens arrived at the

Laboratory, it was never possible to obtain a pure culture of the doubtful organisms. As far as our investigations have gone, however, they tend to throw some suspicion upon mice killed, which on a macroscopic examination show no signs of plague but only on a microscopic examination a few polar-staining bacilli, resembling *B. Pestis* in smears from various organs, and we should be inclined not to class such mice as plague infected until experimental inoculation of other animals has confirmed the diagnosis.

Malaria.

Although not, strictly speaking, coming within the scope of notes upon specimens examined during 1904 and 1905, I should like to bring to your notice the fact that a number of White and Coloured labourers are constantly returning to their homes in the Cape Peninsula, suffering from acute forms of malaria. Cape Town and neighbourhood is supplying a large number of Coloured men to work on railway construction, in Portuguese Territory, on the West African Coast. The blood of the majority of these men when they return is found on microscopic examination to be teeming with malaria parasites. The Coloured boys state that the neighbourhood where they were working was very swampy, that many of their number succumbed to fever, and most complained about the absence of proper medical attention when ill. All that I examined seemed so glad to get back to their homes, and spoke so strongly against the conditions under which they were expected to work, that I doubt whether those who engaged them explained fully the dangers attached to such work.

As mosquitoes of a species which can carry infection from infected to healthy individuals are not unknown in the Cape Peninsula, it becomes a question worthy of consideration whether those suffering from this disease are not a certain danger to the community. In any case, malaria infected persons entering at our ports ought to be followed up, and, if only for their own sakes, subjected to proper treatment.

Water Samples.

During the years 1904 and 1905 a number of samples of water from different Districts in the Colony have been subjected to bacteriological examination, in addition to the ordinary chemical analysis. The great majority of such samples were sent by the Local Authorities of districts where epidemics of Enteric Fever were supposed to have resulted from the consumption of contaminated water. As a rule, the communications received with such samples request that a search be made for *B. Typhosus*, although this is carried out as a matter of routine, we have never yet succeeded in isolating from any sample of water an organism that would give all the classic tests to which it must conform before it can be definitely stated to be *B. Typhosus*.

It must be clearly understood, however, that this inability to isolate Typhoid Bacilli in a water that is suspected as the source of an epidemic does not mean that the supply never contained that organism, because, as a rule, even before any epidemic is noted, a long period must have lapsed, and the chances are that the casual organism will have disappeared before suspicion has been fixed on any definite source. In such cases a negative finding as regards Typhoid Bacilli is of little importance when evidence of other organisms, such as *B. Coli Commune*, *B. Enteritidis sporogenes* and streptococci, which are commonly present in sewage and fæces, is found. The necessity for a bacteriological as well as chemical examination does not yet appear to have been appreciated by those responsible for a pure water supply to the various towns in this Colony. In the majority of cases the danger of infection in any polluted drinking water is from the presence of living bacteria; a bacteriological examination can be made to show, not only their number, but the nature and probable source of many such organisms. A chemical examination, carried out for hygienic purposes, would condemn a water as unfit for human consumption if the amount of organic matter is excessive, although it may be absolutely sterile and show no living bacteria, while it would be quite possible, as shown by Dr. Thresh, for a public water supply of, say, one million gallons daily, to receive 1,000 gallons of crude sewage without the chemical examination showing that it was definitely sewage-polluted, while, on the other hand, the chemical examination of a sample of water to which .01 per cent. of tea had been added, would probably be reported upon as being a worse sample than that containing the sewage. I extract an example given by Dr. Thresh, in a paper

on the subject of the Bacteriological Examination of Water, because, as he says, "it is even yet very difficult to convince some Medical Officers of Health that chemical analysis is of very little use for the detection of sewage pollution in water."

"A sample of crude clarified sewage submitted to examination gave the following results:—

Free Ammonia	3·5	parts	per	100,000.
Organic Ammonia	·51	"	"	"
Oxygen Absorbed	5·35	"	"	"

The water supply to the same town gave the following results:—

Free Ammonia	·002	parts	per	100,000.
Organic Ammonia	·000	"	"	"
Oxygen Absorbed	·019	"	"	"

If to this water 0·1 per cent. of the sewage is added, the effect upon the analytical results can easily be calculated, viz.:—

Free Ammonia	·0055	parts	per	100,000.
Organic Ammonia	·00051	"	"	"
Oxygen Absorbed	·0253	"	"	"

which chemically would be reported upon as pure and good water."

It must not be thought that I wish to contend that a chemical examination is of no value, what is desired is that in all cases a chemical, together with a bacteriological examination and general history of source and condition of possible pollution, should always be taken into consideration before expressing an opinion as to the freedom from pollution of any water supply.

Disinfectants.

Since the publication, in 1903, of Messrs. Rideal and Walker's paper upon the testing of disinfectants, much work upon this important subject has been carried out in this Laboratory on the lines they suggest, and, after a prolonged trial of various other methods for testing the germicidal powers of a fluid, we are of opinion that that now known as the "Rideal-Walker" gives the best and most constant results. No doubt further elaborations and improvements will follow, but at present we have a means by which one can compare the action of what ought to be a germicidal fluid with a standard solution of Carbolic Acid. It has been suggested by the opponents of this method of standardisation that the action of the disinfectant should be tested upon organisms under more natural conditions than those produced by artificial means in vitro, *e.g.*, embedded in organic matter; this question is still under experiment, but our great difficulty is to get a standard medium of organic matter that can be used on all occasions.

The successful carrying out of the investigations into the Carbolic Acid Coefficient of some 150 different disinfectants, has been largely due to the most careful and painstaking work of Mr. W. D. Severn, F.C.S., A.R.C.S., and the matter is of such interest that the results have been embodied in a separate report which I attach.

Milk.

No samples of milk were submitted for Bacteriological examination during 1905, and only one during 1904. This apathy upon the part of Medical Officers of Health and those responsible for the well-being of our infant population, is to be regretted. Numerous samples of milk are examined every year for the presence of added water or to determine the amount of abstracted fat, but no notice seems to be taken of added filth, nor the presence of tubercle or other harmful organisms. A purveyor would appear to be free to supply the general public with milk teeming with disease-producing germs, and if it contained pus from a suppurating udder then it would only be considered rather richer than usual. If a bacteriological examination of water is necessary from a hygienic point of view, how much more is *that* of a fluid which makes a splendid media for the growth and multiplication of most pathogenic organisms? Pasteurisation, sterilisation, boiling and the addition of

preservatives are not the means by which a clean milk supply can be obtained, they are in a great measure necessary because the animals are kept in such dirty surroundings and because all the operations connected with milking and the storage of milk are conducted in such an unhygienic condition that the milk seller finds he must in some way inhibit the growth of organisms which have gained access to the milk during handling, else it would hardly keep long enough for him to sell it. A polluted milk supply can be at least as easily detected by a bacteriological examination as can a polluted water supply.

Cape Town Morgue, Venken Lane.

As Medical Officer in charge of the above Institution, I have received several complaints regarding obnoxious smells emanating from the morgue, and I would again call attention not only to its situation in a narrow lane, in the midst of small dilapidated dwellings and now overlooked by large workshops, but also to the inadequate and inconvenient internal arrangements pointed out in two previous reports. I regret that no steps have been taken to secure larger premises where this necessary work can be carried out with more privacy from and at less inconvenience to those living in the immediate neighbourhood.

The Mortuary frequently is a nuisance to people living near or passing along Venken Lane, moreover, this is a nuisance which it is impossible to remedy as the only means of through ventilation is by windows which open direct on to the public street.

Ambulances or other vehicles bringing or removing bodies draw up in this lane, which is a public thoroughfare, and bodies in all stages of decomposition must be removed from such conveyances and carried across the street to reach the Morgue; frequently there is quite a large audience of small children and others watching those operations.

The internal arrangements are even more inconvenient; there is only one Mortuary for both European and Native cases, and no waiting room where relatives or friends can be shown when they come to identify a body.

I would strongly urge upon the Government the necessity of either acquiring more space round the present building or of purchasing a larger and less crowded site for a **new** Mortuary. Complaints regarding noxious odours in the neighbourhood have recently been so frequent that it has been found necessary to have a glass cover made for one of the tables to prevent as far as possible the nuisance arising from bodies brought in an advanced stage of decomposition, as is usually the case with those found drowned.

GEO. W. ROBERTSON,

Bacteriological Assistant in the Office of the Medical
Officer of Health for the Colony.

1st June, 1906.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "A."

No II.

SOME OBSERVATIONS AND REMARKS ON THE PROGRESS AND PRESENT POSITION OF THE TESTING OF DISINFECTANTS.

To the Medical Officer of Health for the Colony.

The subject of disinfection by means of antiseptic fluids and powders has assumed increasing importance during the last few years. This has been to a great extent due to the production of a large number of new fluids by various commercial firms, and the consequent keen rivalry which has resulted in their attempts to produce the most powerful bacteriocides at the least possible cost. This healthy competition between the manufacturers would not have resulted without the discovery of a method of accurately comparing the actual germ-destroying power of their wares, first with some definite standard and thereby with one another. Since the experiments of Koch, Gaffky, Loeffler, Klein and others, many elaborate researches on the action of antiseptic vapours and fluids acting under the most varied conditions have been performed. The modes of action on different species of bacteria placed in the open, or enclosed in blankets, garments, etc., of gases, steam at varying pressures and hot air, are now fairly well understood. But the gases and vapours which could be thus employed are few in number in comparison with the very numerous fluids and solutions which can be and are employed for rendering infective matter innocuous. It has come about that experts in hygiene have been frequently at cross purposes in regard to the efficiency of fluid antiseptic agents, not only because of the actual numbers of such fluids and their very various modes of action, but also on account of the numerous methods employed in testing them. Some of the methods used in the past have been as follows:—

(1) *The Simple Strength Method.*

Various strengths of the disinfectant were allowed to act on a fluid culture for the same time, small amounts of the mixture being then removed to large quantities of nutrient fluid, and growth watched for.

(2) *The Simple Time Method.*

A mixture was made of equal amounts of the disinfectant at a known strength, and a broth culture of the organism. Subcultures were made at definite intervals of time, the dilution being taken as double owing to the admixture of the fluid culture.

(3) *The Thread Method.*

Small pieces of sterile thread (or paper) were soaked in a culture of the organism to be tested. They were then exposed for varied periods of time to the action of definite strengths of the fluid under consideration. Being withdrawn, each thread was then rapidly washed in sterile water and placed upon the surface of a nutrient jelly, which was incubated and subsequently examined for growth or otherwise of the organism used.

Various modifications of the above methods were introduced by Koch, Sternberg, Wynter Blyth, and others; and much information of interest to bacteriologists was obtained, but the bacteria employed were of many different species and the variations in technique and the media employed entirely prevented the results of such experiments being placed before manufacturers or the public in an intelligible form. Opportunity was also afforded for imposture and pseudo scientific quackery of the worst kind, inasmuch as such loose statements as that a certain disinfectant killed "the microbes of disease" in a particular time could not be contradicted authoritatively. There was also no way of instituting comparisons between results obtained under such widely differing circumstances. Consequently for a long time the Public and even Municipal bodies and Governments failed to take more than a languid interest in the scientific testing of disinfectants, and as long as a liquid "smelt of disinfectants," and was cheap, everyone felt safe where it was used.

Bacteriologists therefore sought to devise a method of testing antiseptic fluids which would yield results capable of expression in figures, so that the figure representing the efficiency of one disinfectant could be compared at sight with that of any other or others. This necessitated that every disinfectant should be tested

under the same conditions. These conditions were that: (1) The same test organism was used; (2) the same medium was used to cultivate it; (3) the age of the culture, and (4) the temperature of growth were the same; (5) the various periods of action of the disinfectant on the culture were identical in every case; (6) the strength of the various dilutions of the fluid were also the same, and (7) the conditions of operating were as nearly similar as possible.

The above conditions were fulfilled by the following method:—

The organism used was *Bacterium coli commune* in the form of a culture in nutrient bouillon, 24 hours old, grown at a temperature of 37° C.

Five strengths of dilution in sterile distilled water of the disinfectant were used, viz.: 2 per cent., 1 per cent., 0·5 per cent., 0·2 per cent., and 0·1 per cent.

Each of these dilutions was allowed to act on the *B. coli* culture for three stated periods of time, viz.: 5 minutes, 15 minutes, and 1 hour; and plates of agar-agar were poured, to the number of 15. One at each of the periods of time, for each of the five dilutions.

In addition to the above experiments a trial of the disinfectant was made at the same dilutions on a mixture of organisms. The mixture used was the ordinary tap water of the laboratory, and the following was the rationale employed:—

Five sterile plugged 8 oz. phials each contained one of the dilutions 2 per cent., 1 per cent., 0·5 per cent., 0·2 per cent. and 0·1 per cent. to the amount of 100 c.c. The dilutions were made with the tap water, and the bottles were then kept for exactly a week, at the ordinary room temperature. Then from each bottle a long slope of agar-agar was inoculated in a single streak with a loop of the fluid. These tubes were then incubated for 48 hours at 37° C.

The results of such a test as has been described above were expressed as follows:—

Agar Plates.

Dilutions.	Time of Exposure.		
	5 Minutes.	15 Minutes.	1 Hour.
2·0 per cent.	Sterile	Sterile	Sterile.
1·0 per cent.	Sterile	Sterile	Sterile.
0·5 per cent.	A few Colonies	Sterile	Sterile.
0·2 per cent.	Numerous Colonies	A few	Sterile.
0·1 per cent.	Innumerable Colonies	Numerous	Numerous.

Tapwater Experiment.

2·0 per cent.	Sterile.
1·0 per cent.	Sterile
0·5 per cent.	Sterile
0·2 per cent.	Growth (Fluorescens)
0·1 per cent.	Copious growth (Fluorescens and another).

This is the record of an actual experiment, and the disinfectant in question received 12 points out of a possible 20—, on the principle that out of 15 plates and five tubes from the tapwater experiment, making 20 inoculations in all, 12 remained sterile.

The defects of the above method are many. The principal objections may be thus summarised:—

- (1) The dilutions used are much too far apart, and they do not permit of exactitude, covering as they do, from 1 in 50 to 1 in 1,000 in 5 steps.
- (2) The difficulties of manipulating tubes of fluid agar-agar and the pouring of perfect plates at exact intervals of time.
- (3) The placing of the same value on a plate with a "few" colonies as on one with "innumerable" colonies.
- (4) The use of tapwater as "a mixture of organisms." This factor must necessarily vary enormously in different localities, and the substitution of artificial constant mixtures of cultures is by no means an easy task.
- (5) The time which must elapse between the reception of a sample of disinfectant and the sending of a report upon it cannot be less than nine days, allowing a week for the tapwater experiment.
- (6) Although by this method some comparison between different germicidal fluids is arrived at, there is no comparison with any definite fluid which may be taken as a standard in terms of which the killing power can be expressed.
- (7) If in the case of two disinfectants all the plates and tubes are sterile, or if all grow, there is no way of telling which of the two is best or worst.

With the object of eliminating the above objections, Messrs. Rideal and Ainslie Walker have described a method for testing disinfectants, which has so far entirely superseded all the former methods.

Five tubes contain a certain definite and similar quantity, each of a different strength, of the disinfectant in question. To each of these tubes is added a definite identical quantity of a 24-hour bouillon culture of the organism chosen. The tubes are shaken, and, at stated intervals of time, a loopful of the contents of each is inoculated into sterile bouillon. The bouillon tubes are incubated for a sufficient time. At the same time and with the same culture another five tubes containing different strengths of pure carbolic acid (Absolute Phenol) are similarly dealt with.

In this method five different strengths are used and six different periods of time. *The strength is the variable factor, the times are constant for every examination and for the phenol comparison.*

The following are examples of the testing of three different disinfectants by the Rideal-Walker method against one phenol experiment:—

Disinfectants and Phenol Comparison.	Dilutions 1 part disin- fectant in.... parts water.	Time of exposure of coli culture to action of disinfectant in minutes.					
		2½	5	7½	10	12½	15
Disinfectant No. 1.	800	+	—	—	—	—	—
	850	+	+	—	—	—	—
	900	+	+	+	—	—	—
	950	+	+	+	+	—	—
	1,000	+	+	+	+	+	—
Disinfectant No. 2.	470	+	—	—	—	—	—
	475	+	—	—	—	—	—
	480	+	+	—	—	—	—
	485	+	+	+	—	—	—
	500	+	+	+	+	+	—
Disinfectant No. 3.	50	+	+	+	+	+	—
	55	+	+	+	+	+	+
	60	+	+	+	+	+	+
	65	+	+	+	+	+	+
	70	+	+	+	+	+	+
Carbolic Acid (Absolute Phenol).	80	+	—	—	—	—	—
	85	+	+	—	—	—	—
	90	+	+	+	—	—	—
	95	+	+	+	+	—	—
	100	+	+	+	+	+	—

The sign + means that growth has occurred, and therefore that the disinfectant has failed to kill in the time, and at the strength specified. The sign — means sterility of the broth.

The coli culture used in the above cases was the same for all the four experiments, viz.: a 24-hour culture at 37° C., and the broth tubes (120 in all) were from the same batch.

(3) When a large number of fluids have to be examined a comfortable number to undertake is three at a time. These, with one phenol comparison test, make a convenient set for one operation.

(4) The same strain of coli or typhoid should be used for all experiments. The age of the culture, the temperature of incubation, the reaction of the bouillon and its composition must be the same.

(5) Instead of using so many "drops" of culture, we use 0.2 c.c. for each of the five dilutions, measured with a sterile 1 c.c. pipette in five main divisions.

(6) We formerly used the test tube rack described by Messrs. Rideal and Walker, with the six sets of five tubes behind and the five places in front for the dilutions, the whole operation being conducted with one ordinary öse. In this dusty country, tubes occasionally become contaminated in this way, as was found by subsequent plate culture. It is also a somewhat fatiguing operation to inoculate 120 tubes making "Koch's grasp" for every one of them together with one of the dilution tubes. We therefore now employ the following modification:—

A separate stand with 5 holes, rather wide apart, stands in front of the rack with the 30 broth tubes. This stand holds the five dilution tubes in such a way that they slope towards the operator at an angle of 45° . Each tube is provided with a separate öse of exactly the same dimensions and form. The handles of the ösen pass through hoods like inverted thistle funnels with a padding of sterile cotton wool between the handle and the upper part of the wall of the funnel. The wool prevents contamination, but is really more important in preventing jar and rattle when the tubes are shaken. Before the experiment these hooded ösen are kept in position in empty sterile tubes and there is ample time to introduce them into the dilution tube in the 30 seconds after adding the 0.2 c.c. of culture, replacing the plug, shaking, withdrawing, and throwing away the plug. It is then only necessary to hold one tube of bouillon each time for inoculation.

We have had hardly any tubes contaminated since operating by this method and the whole operation is rendered much more simple and less hurried and irksome. The dilution tubes should be wider and longer than the ordinary $6'' \times \frac{5}{8}''$ lipless broth tubes so that the loop may well reach the 10 c.c. of broth before the lip of the hood touches the top of the broth tube. The handles of the ösen are adjustable as regards length.

What value, if any, disinfectant powders possess is still problematical, but when they are sent to be tested we proceed as follows:—One hundred grammes of the powder are thrown into a litre stoppered measure, made up to the mark with sterile distilled water, shaken at frequent intervals for 4 hours, and then left to subside till the same hour next day at which the water was added. The supernatant fluid is syphoned off and 10 c.c. of it regarded as equal to 1 gramme of the powder. The objections to this method as giving any clue to the operation of powders in practice are many and obvious, but it is difficult to imagine a fairer method of procedure.

Many of our experiments were done on dilutions made with sterile distilled water. Latterly they have been made with sterile Cape Town tapwater, which is very low in total solids and extraordinarily free from organic matter. They have all been done on cultures of bacterium coli up till the last batch of samples, which we are now testing on Typhoid in consequence of the brief summary of the Report of the Royal Sanitary Institute Committee, contained in "Public Health" for May, 1906.

We have long ago conjectured the possibilities of considerable variations in results being due to the employment of water of high permanent hardness, for diluting, by some experimenters, and very soft or distilled water by others. It is of the highest importance that Public Health laboratories in different parts of the world should work their estimations of disinfectant activity on as nearly similar lines as possible. Therefore the decision of the Committee that distilled water should be used is obviously a wise one. We do not observe that any details of the composition of the nutrient broth are given, beyond that the reaction is to be + 15. This is a matter which should be agreed upon finally and as soon as possible. The method of preparation should be given in detail. It seems obvious that the broth should be made from a beef extract of nearly constant composition, instead of from fresh meat.

In the formula for a broth given by Sommerville and Walker, in "Public Health" for March, 1906, they advocate 20 grammes of Lemco, and 10 grammes salt per litre. As these quantities appeared to us to be unnecessarily high, we began lately an investigation of this point. Four broths were prepared, of the following compositions:—

No. 1	...	Lemco	20	Salt	10	Peptone	20	Water	1000
No. 2	...	„	15	„	7.5	„	15	„	1000
No. 3	...	„	10	„	5	„	10	„	1000
No. 4	...	„	5	„	2.5	„	5	„	1000

The above were titrated with Phenol Phthalein, and brought to exactly the same reaction—viz.: + 15 (Eyre). Test-tubes of each containing 10 c.c. were inoculated simultaneously with B. Typhi from the same broth culture, and these were incubated at 37° C. for 48 hours. Agar plates poured from high dilutions of each of these broth cultures gave the greatest number of colonies with broth No. 2. Although this is only a preliminary and isolated test, it would appear that 20 grammes of Lemco per litre is an unnecessarily large amount. From the experiments, and from other observations, there can be little doubt that 3 and 5 grammes per litre are too little for the most luxuriant growth of organisms of the typhoid-coli group. We are inclined to the belief that from 10 to 15 grammes of Lemco, and 6 to 7.5 grammes of salt would be quite enough. It must also be remembered that Lemco itself contains over 8 per cent. of salt. These experiments will be continued.

As to the organisms to be employed—it seems that most workers are agreed that, except for special purposes, a nonspore-bearing bacterium, such as B. coli, B. typhi, or a B. paratyphi, is the most suitable and convenient. Although most of our own work has been conducted with B. coli, we have reason to believe that there is less saprophytic variation between various strains of typhoid than between the coli forms. We are glad to at once transfer our allegiance to typhoid as the Committee recommends, beginning with the 30 disinfectant fluids and powders which we now have in hand, the form of tender by manufacturers to the Cape Government stipulating that B. typhi or B. coli are to be used.

There is, however, one point to be considered in favour of using a coli form, which is that a medical officer or analyst in an out-of-the-way place may not have a typhoid culture when suddenly called on to test a disinfectant. He can always isolate a coli form but may find it impossible to obtain a typhoid culture for a long time. Even if we regard the matter as now settled, we would venture to suggest that Herr Kral, of Prag, and other trustworthy people, should be requested to keep cultures of the particular strain fixed on as “for testing disinfectants.”

A point which seems to us important in the interpretation of results is that very often two or more possible co-efficients are obtainable for one experiment. Here is a case in point:—

Disinfectants and Comparison.	Dilutions 1 in.....	Time of exposure of culture in minutes.					
		2½	5	7½	10	12½	15
Disinfectant M.	850	+	—	—	—	—	—
	950	+	+	—	—	—	—
	1,000	+	+	+	—	—	—
	1,100	+	+	+	+	+	—
	1,200	+	+	+	+	+	+
Carbolic Acid (Absolute Phenol).	80	—	—	—	—	—	—
	87	+	—	—	—	—	—
	92	+	—	—	—	—	—
	97	+	+	—	—	—	—
	103	+	+	+	—	—	—

Organism Coli (Strain D) 24 hours cult. at 37° C. Incubated 48 hours. Room temperature 20° C.

There are here two points to note, the similarity between the action of Phenol at 1 in 87 and 1 in 92, and the fact that we have the choice of four possible co-efficients, viz.:

$\frac{850}{87} = 9.77, \frac{850}{92} = 9.24, \frac{950}{97} = 9.79, \text{ and } \frac{1000}{103} = 9.70,$

Surely, under such circumstances, we are justified in taking an average of these co-efficients without repeating the experiment. Thus:—

$$\frac{9.77 + 9.24 + 9.79 + 9.70}{4} = 9.65 = \text{co-efficient.}$$

This point is still more emphasized in the table on page A—10, where we actually have no defects at all in the curve given by the + signs, and 5 possible co-efficients. It is only accident which makes these all equal.

We have now considerably over 150 estimations of carbolic acid co-efficients by the Rideal-Walker method, and wish to express our entire confidence in it. It is the best, in fact the only method of accurately expressing in figures the relative germicidal power of disinfectants under an agreed upon set of conditions. The introduction of fœces, urine and other complicated and little understood organised mixtures into this simple and reliable test is nothing short of vandalism. We do not believe that Messrs. Rideal and Walker ever intended the method to be a test for penetrative power of necessarily variable albuminous envelops. If such experiments are required they should be made on entirely different lines, and should be supplementary to the ordinary estimation of the killing power of the disinfectant under examination. Even, supposing that a standard albuminous mixture of mucin, globulins, etc., could be formulated for admixture with the culture and disinfectant, it is extremely questionable whether any useful purpose would be served by such a procedure.

In the paper by Sommerville and Walker in "Public Health" for March, 1906, the subsidence of certain active constituents of Izal is remarked upon, and results of experiments are given, which conclusively prove the subsidence to be the cause of a marked decline in the effectiveness of the upper strata in drums or bottles of Izal. We have repeatedly noticed this, but apparently the tendency to separation has much increased in samples of Izal submitted here for examination during the last six months or so. Referring to laboratory notes made in the course of examinations of Izal samples during the last two years, we find entries to the effect that both 10 per cent. and 1 per cent. dilutions of Izal remained, for long periods, nearly or quite homogeneous. In the last two samples, examined on May 29th and June 6th, 1906, the tendency to precipitation in a 1 per cent. solution was obvious in a few minutes, and the flask was shaken before making each further dilution. That the manufacturers recognise this tendency to precipitate is obvious from the fact that they label the drums "Reverse and shake." This rapid subsidence of active ingredients, as Sommerville and Walker point out, may be the cause of some observers obtaining low results with certain fluids, but we have examined several other fluids in which discrepancies between different observers could be much more simply accounted for, namely, by very wide variations in the germicidal power of different samples, even when tested together under exactly the same conditions. One fluid, of which we tested different samples on several occasions with the same strain of *B. coli*, and under similar conditions, gave co-efficients of 4.5, 1.9, 2.2, 9.0, and 3.0. This is far the greatest variation we have met with, but several other instances convince us that quite different compositions may be sold by a manufacturer under the same name. This is very undesirable, unless the change in composition is notified by the manufacturer, as Messrs. Jeyes' notified the increase in the co-efficient of Cyllin from 11 to 13, or in the case of the two fluids, respectively labelled "Snowdol 9 co-efficient," and "Snowdol 13 co-efficient."

As has been repeatedly pointed out, the temperature of medication is a matter of importance, although the actual co-efficient obtained, when the disinfectants and the phenol are tested together, is not greatly affected. Here, in Cape Town, we may have great variations in temperature, as, on a cold winter day in June, the sun may suddenly blaze out and make the air quite hot, so that we get phenol comparisons with the same results at 1 in 70, and 1 in 120. If, therefore, as many as three or four experiments are done at once, the phenol comparison should be performed between the others, and the temperature of the room should be kept as nearly the same as possible throughout all the tests, and noted at the time of each one.

There is one other precaution, which we have found it desirable to take. Every broth culture used for the tests should be inoculated from another broth culture, and always with loops of the same size. It is much easier to get a uniform amount, in a uniform condition from broth than from agar-agar, and in the latter case bacterial aggregations often, which do not break up, may get into the broth, and may cause irregular fertility in a tube or tubes. It is a good rule always to make more than one broth culture, and to use one for carrying on. Of course purity must be looked to occasionally.

TABLE showing some Results obtained by the RIDEAL-WALKER Method on various
DISINFECTANTS.

Name of Disinfectant.	Firm Supplying, Source, and other Details.	Date of Observation.	Organism used.	Dilution fraction.	Carbolic Acid Co-efficient.
Acme (fluid) ...	J & A. Rae, Cape Town ...	12.1.06	B. coli	$\frac{300}{90}$	3·3
Bactox ...	R. Leaver & Co. ...	19.6.06	B. typhi	$\frac{250}{90}$	8·94
Cannon's fluid ...	Chief Railway Storekeeper ...	9.10.05	B. coli	$\frac{250}{80}$	3·1
Carbolacene (2)...	Civil Service Stores, Cape Town...	11.5.06	B. coli	$\frac{50}{100}$	0·50
No. 5 Soluble Carbolic fluid (1)	Chief Railway Storekeeper : contract sample	1904	B. coli	$\frac{400}{90}$	4·4
No. 5 Soluble Carbolic fluid	McDougall Bros. ...	19.5.06	B. typhi	$\frac{400}{95}$	4·21
Crephol ...	R. M. Ross & Co. ...	18.4.06	B. coli	$\frac{300}{80}$	3·75
Cyllin (1) ...	Government Stores : ? deteriorated in Store	27.10.05	B. coli	$\frac{700}{75}$	9·3
Cyllin (2) ...	Chief Railway Storekeeper ...	17.8.04	B. coli	$\frac{1000}{90}$	11·0
Cyllin (3) ...	Purchased in open market, Cape Town	11.05	B. coli	$\frac{1000}{90}$	11·0
Cyllin (4) ...	New drum, Chief Inspector of Stores	7.11.05	B. coli	$\frac{800}{70}$	11·4
Cyllin (5) ...	Pink-coloured emulsion, labelled "for sea-water use." Dilutions made with sterile sea-water	1.2.06	B. coli	$\frac{1000}{80}$	12·5
Cyllin (6) ...	Supplied by agents : ? deteriorated or different make	30.5.06	B. coli	$\frac{1000}{97}$	10·3
Cyllin (7) ...	Same Sample as No. (6) ...	7.6.06	B. typhi	$\frac{1200}{110}$	10·9
Cyllin (8) ...	Small bottle, supplied, as sample by Otto Landsberg & Co., Cape Town.	1.6.06	B. typhi	$\frac{1300}{103}$	12·6
Eucryl ...	Chief Railway Storekeeper : contract sample	9.2.05	B. coli	$\frac{250}{90}$	2·77
Izal (1) ...	Messrs. J. O. Smith ...	1904	B. coli	$\frac{1000}{90}$	11·0
Izal (2) ...	Purchased in open market, Cape Town. Small square green glass bottle	7.11.05	B. coli	$\frac{775}{70}$	11·0
Izal (3) ...	Small tin bottle, supplied, as sample by Messrs. Woodhead, Plant & Co., Cape Town.	7.6.06	B. typhi	$\frac{1300}{100}$	13·0
Jeyes' fluid (1) ...	Chief Railway Storekeeper : contract sample	1904	B. coli	$\frac{200}{90}$	2·2
Jeyes' fluid (2) ...	Government Store Superintendent	27.10.05	B. coli	$\frac{250}{80}$	3·12
Kerol (1) ...	Chief Railway Storekeeper ...	1.12.05	B. coli	$\frac{950}{80}$	11·9
Kerol (2) ...	P. J. Petersen & Co. ...	7.6.05	B. typhi	$\frac{1100}{120}$	9·16
Radium ...	Cape Div. Council : sent to M O.H for the Colony for examination	7.11.05	B. coli	$\frac{200}{70}$	2·8
Sanitine ...	Chief Railway Storekeeper ...	27.10.05	B. coli	$\frac{175}{70}$	2·5
Snowdol (1) ...	Messrs. Heynes, Mathew & Co., Cape Town : sent by Chief Railway Storekeeper	29.1.06	B. coli	$\frac{800}{85}$	9·41
Snowdol "13" (2)	Sent by agents, Messrs. Heynes, Mathew & Co., labelled "13" Co-efficient	11.6.06	B. typhi	$\frac{1200}{100}$	12·00
Taylor's "A 1" fluid	Bunce Bros. : same result on sample sent by Chief Railway Storekeeper	9.10.05	B. coli	$\frac{300}{80}$	3·75
Izal Powder ...	On 10% extract, 10 cc. of extract = 1 gramme powder : Messrs. Woodhead, Plant & Co.	16.6.05	B. typhi	$\frac{20}{90}$	0·22
Jeyes' concentrated Powder	Same method as Izal Powder : Messrs. Otto Landsberg & Co.	16.6.05	B. typhi	$\frac{20}{120}$	0·16

The above results are inserted for comparison with those already published by others.

GEO. W. ROBERTSON.
WALTER D. SEVERN.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "A."

No. III.

LETTER ADDRESSED TO MEDICAL PRACTITIONERS AND PUBLIC HOSPITALS
REQUESTING CO-OPERATION IN REGARD TO THE ESTABLISHMENT OF A
PATHOLOGICAL MUSEUM.Office of the Medical Officer of Health
for the Colony,

Cape Town, 20th October, 1905.

Dear Sir,—Having in view the great loss at present taking place in this Colony of valuable pathological material owing to the want of adequate means for the collection, preparation and preservation of specimens, I have the honour to inform you that, in conjunction with Dr. G. W. Robertson, Bacteriological Assistant in this Office, I am arranging for the preparation and examination of pathological specimens and their subsequent preservation in the form of a Pathological Museum attached to the Government Department of Public Health. I shall, therefore, esteem it a kindness if I may enlist your co-operation in this most important object by the transmission of interesting or rare specimens for examination and inclusion in the Museum.

At the present moment, mainly due to Dr. Robertson's initiative, and the kindness of medical men practising in the Cape Peninsula, who have from time to time sent specimens for preservation, a respectable nucleus of such a Museum is already in existence, and with the general assistance of the Profession in other parts of the Colony there can be no doubt as to the ultimate success of the undertaking. I need scarcely say that, should the project result in the formation of a Pathological Museum worthy of the name, such arrangements will be made as will always ensure its being fully available for the use of members of the Medical Profession.

If, therefore, you will be prepared to assist in this undertaking, I shall be glad to forward to you such necessary receptacles as may from time to time be required for the carriage of specimens, together with particulars as to the steps to be adopted in forwarding them, with forms on which to furnish notes of the case from which the specimen has been derived. On receipt of any specimen, a report on its examination will be forwarded to you if desired; moreover, if it be placed in the Museum, the name of the donor will be indicated in the Official Catalogue.

I may mention that all kinds of specimens are desired, both such as are obtained ante-mortem and post-mortem, both pathological and developmental, and of animals as well as of human beings; nor need you confine your selection to merely such specimens as you may consider as rare, for material of whatever kind will be welcomed, so as eventually to obtain for the Museum a complete series, from the commonest to the rarest examples.

Should you know of anyone willing to assist in this matter, will you kindly bring the subject to his notice.

Trusting to receive a promise of your kind co-operation in the directions I have indicated,

I have the honour to remain,

Yours very faithfully,

A. JOHN GREGORY.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "A."

No. IV.

REPORT OF THE PORT HEALTH OFFICER AT TABLE BAY FOR THE YEARS 1904 AND 1905.

Infectious Diseases.

The following is an analysis of cases of infectious disease occurring on board ships and in the Dock Area during the years 1904 and 1905 :—

1904.—Chicken-pox, 20 ; Pulmonary Phthisis, 9 ; Beri-Beri, 7 ; Yaws, 1 ; Erysipelas, 1 ; Diphtheria, 2 ; Whooping-Cough, 5 ; Enteric Fever, 9 ; Scarlet Fever, 7 ; and Measles, 25. Total, 86.

1905.—Chicken-pox, 9 ; Pulmonary Phthisis, 10 ; Beri-Beri, 21 ; Whooping-Cough, 7 ; Enteric Fever, 15 ; Scarlet Fever, 8 ; Measles, 199 ; Small-pox, 10 ; Leprosy, 1 ; Scurvy, 33 ; and Rôtheln, 4. Total, 317.

*Measures adopted, with Examples.**Plague.*

(1). All passengers arriving from plague-infected ports were examined by the Port Health Officer until September, 1905, after which date only Natives and Asiatics were examined. In 1904, 1,400 Natives were examined, and in 1905, 2,500.

(2). The names of all such passengers were sent to the Local Authority of the area to which they proceeded. This was discontinued in August, 1905.

(3). All Asiatic crews were examined by the Port Health Officer. These numbered 3,000 in 1904, and 4,000 in 1905.

On three ships only were there persons with suspicious glandular buboes. The ships were quarantined for less than a day, and after examination of the cases by Dr. Robertson, Government Bacteriologist, were released, namely, the S.S. "Clan MacFarlane," in May ; the S.S. "Umvoti," in June ; and the S.S. "Clan MacLeod," in August, 1904.

(4). All rats caught on ships and in the Docks by the Government Rat-catcher as well as those brought by the public, which were paid for at 6d. a head, were sent up to the Laboratory for examination.

	1904.	1905.
Number of Rats caught on board ships ...	6,304	8,633
" " " inside area of Docks ...	5,218	10,231
" " " outside " " ...	1,550	1,645
	<hr/> 13,072	<hr/> 20,509

In July, 1904, I arranged that particulars of locality and condition of all rats caught and found dead should be reported to me daily.

(5) All ships from plague ports were specially visited, cargo examined, and the names of consignees taken ; search was made for rats, and Masters were required to notify any mortality amongst rats ; in 1905 377 ships were visited, and 900 visits made by Ratcatcher.

(6) Ropes, gangways and nettings were tarred and shields placed on ropes, as also fenders between ships and wharves. The tarring was discontinued in August, 1904.

Small-pox.

1904, March to December. ...	...	...	Not a case.
1905. ...	...	...	Cases on two ships.

The H.M.T. "Dilwara" arrived at 6 p.m. on the 23rd June, 1905, with two soldiers suffering from Small-pox. These men had been isolated on the boat deck and the contacts vaccinated ; both patients had been well vaccinated three or four years before, and the eruption was modified and not severe. I examined every person on board, and vaccinated those who required it ; the patients were removed to Rentzkie's

Farm. All the clothing, bedding, etc., had been burnt, and disinfection thoroughly done. The ship was freed from quarantine on the 24th idem.

The cable ship "Britannia" arrived on the 17th July, 1905, and the Surgeon declared two cases of Small-pox and five cases of Chicken-pox. The former were isolated and were of severe confluent type; the latter were convalescent, and were not isolated. Two deaths from Small-pox had taken place at Loanda on the 24th June, 1905. The ship was quarantined, and the next day Doctors Mitchell and Robertson visited the ship with me, and the whole five cases of supposed Chicken-pox were diagnosed as Small-pox. Seven cases in all were removed to Rentzkie's Farm. Every man on board was examined, but no other cases were discovered.

No vaccination had been done on board since March, when the old crew had been vaccinated; but 24 new hands had been shipped thereafter. I examined the crew, and found that all but two appeared to have been previously vaccinated. Of the European cases four had been vaccinated only as children, one with two and two with four marks, while the fifth had been vaccinated fourteen years ago. These were all mild cases. Of the coloured cases two were severe and had never been vaccinated. One was mild and had been vaccinated unsuccessfully in March. I vaccinated and re-vaccinated every man on board, except those who had had small-pox previously, and then disinfected the ship.

On the 19th July quarantine was provisionally raised, and ship allowed in dry dock, the native crew being still confined to the ship with Police Watch.

After a week I re-vaccinated all cases which had not properly taken. No case of suspicious nature occurred, and on 2nd of August I declared the ship entirely free. This ship returned after over 6 months' absence and reported the disease had never again appeared.

This ship is a remarkable instance of seven cases of Small-pox ranging freely about a ship, the affected men mixing with their comrades, so that if ever there was a chance of Small-pox sweeping a ship, it was here. What saved this result was shown by my examination of the Native crew on arrival, which established the fact that all had been vaccinated at some time or other, except five men—the three affected and two others—and of the three the one least affected was probably vaccinated before, though he had no marks. The two others were constitutionally immune to Small-pox, as on repeated vaccination by me they did not take in the slightest degree.

During the recent existence of Small-pox in Cape Town the Medical Officer of Health of Cape Town on several occasions notified me of several Cape boys who worked in coal gangs at the Docks being found in town suffering from Small-pox; no suspicious cases were found, but I vaccinated all unprotected persons. In September I, with the assistance of Dr. Fenoulhet, vaccinated all the Natives in the Docks Location—over 850 in number. No case of Small-pox has occurred amongst those living in the Dock shore area.

Thereafter I have made it a routine practice to vaccinate all unprotected Natives coming from the coast on Monday mails. Small-pox having been rumoured as existing in German South West Africa, all unprotected Natives are similarly vaccinated.

Chicken-pox.

This is not a notifiable disease in Cape Town, though it is so in the Docks. Owing to the possibility of mistaking Small-pox for it, I exercise great care as to the diagnosis and tracing of cases.

Phthisis Pulmonary.

Under the Immigration Act care is taken that cases of this disease, which might become a public charge, do not enter the Colony. A bond is insisted upon where any doubt exists on this score.

Beri-Beri.

This disease is deemed to occur amongst whites and Asiatics.

S.S. "Clan McAlister"	...	6 cases,	September, 1904.
S.S. "Clan Ogilvie"	...	6 "	August, 1905.
S.S. "Clan Chisholm"	...	10 "	October, 1905.
S.S. "Umzinto"	...	1 "	November, 1905.
Swedish barque "Aagot," with timber, 105 days out from Archangel	...	4 "	November, 1904.
Ship "Lief," Norwegian, from America, with timber	...	2 "	June, 1905.
Ship "Birma," from Sweden, with timber	...	2 "	October, 1905.

Whether the affection is really Beri-Beri in whites as in Asiatics I have grave doubts. Both have oedema, but I have found in whites affected that the knee-jerks are normal, or even plus, even in advanced cases, and the respiratory and cardiac symptoms are by no means constant and disappear on the continued duration of a case, which approaches more one of anæmia; whereas in Asiatics the jerks are only plus at the beginning, and the other symptoms are more constant. In Asiatics the wasting of muscles and paresis in advanced cases are marked, not so in Whites. In the White cases I have not been able to find want of dietetic variety or sufficiency as the cause, nor in Indians, as the "Clan" boats are exceptionally well provisioned for natives.

The White cases seem to occur in Norwegian timber boats, and some assert that the cause is the exhalations from timber, or bilgewater impregnated from timber, producing a kind of Toxæmia. They seem to me to approach more to the atrophic changes in Scurvy, and not due to a micro-organism like true Beri-Beri. Excessive labour at pumping was a contributive cause in one ship. It is said that in Italian ships with abundance of oily food and carbohydrates as in macaroni, etc., the affection is not found. In Indians the micro-organism seems all but proved; one ship arrived with but one slight case, and in a week nearly a dozen cases occurred.

Treatment:

1. Isolation in a part of ship.
2. Clothing and bedding treated with disinfectant solutions and placed in sun to dry.
3. Forecastle washed with cyllin and sprayed with formalin and woodwork scraped and painted afresh.
4. Dietetic errors corrected.

Several fulminating cases have occurred where the only symptom that preceded death was very rapid pulse.

Scurvy.

This disease prevails in the Docks Native Location. Natives coming to large cities live mostly on mealies and tea, and rarely obtain the milk and vegetables to be had at their kraals.

No. of attendances of Outdoor Patients (at work).

1904.	...	3,921,
1905.	...	2,433.

Bed Patients.

1904.	20 in Hospital 642 days; average stay 32 days.
1905.	22 in Hospital 389 days; average stay 17·7 days.

I myself took over the Hospital in October, 1904. Before that the allowance of Lime Juice was one ounce per man every second day, but I increased this to one ounce, and in obstinate cases to two ounces, daily. This may have something to do with the improvement in 1905.

Natives from German South West Africa.

The "Woerman" boats each month brought from 100 to 300 Kaffirs, time-expired from field service. Many of these were debilitated from Scurvy, some with Phthisis, Ague, Rheumatism, Enteric Fever and other debilitating diseases, and their being deposited in the Colony in such a condition became a serious question. The German Government was approached, and all Natives too weak to proceed are placed, under my care and at the expense of the German Government, in the Docks Native Location Hospital till they recover. In 1905, I personally examined on these boats probably about 2,000 natives.

Unsound Food Stuffs.

The Staff at my disposal is one Chief Sanitary Inspector and two Sub-Sanitary Inspectors.

I myself visit every ship, which carries frozen meat, and enquire as to its condition, and my Inspector with one of his subordinates goes aboard, and through the sheds throughout the day. He notes the condition of cargo imported and reports at once to me on anything suspicious. If anything requires condemnation, I notify the Dock Superintendent and Surveyor of Customs, who communicate with the consignees as to removal or destruction. The condemned goods are taken out to sea on a Harbour Board Barge.

In 1904 various articles, provisions, eggs, bananas, peas, apples, potatoes, beef and fish were so condemned and destroyed, but no serious matter occurred, except in the case of the tinned meat rejected by the Army Service Corps.

Condemned Tinned Meat.

In June, 1904, the Army Service Corps contracted to have 500 tons of condemned tinned meat destroyed by dumping at sea. In doing this all necessary precautions seemed to have been taken, a tug took a barge 20 miles out to sea and in presence of an Army Service Officer and Customs Official the meat was cast overboard. A few days after it was reported that tins were being washed up on the shores of Table Bay, and it was feared Kaffirs and others eating them might contract Toxæmia. This came simultaneously to my ears, and to the notice of the Medical Officer of Health for the Colony. I at once requested the Port Captain to stop further dumping of the 213 tons which remained. I made experiments with tins, found that the blown ones did not sink, and I sent out the remainder under charge of my Inspector, with strict orders to cut every tin open. All sunk and did not appear again.

1905, May. Frozen Meat.

The "Highland Corrie" arrived from Buenos Ayres, and, through some defect in the cold chambers, a considerable odour was experienced on the hatches being taken off. I inspected the cargo in the hatches, and, on the first portion being landed, I found that the top layers at least were quite sound, although some odour clung to the canvas in which the meat was packed.

The point to determine was when the level of the cargo where the meat was bad should be reached.

I then placed an Inspector at the cargo shed, with orders to examine every package that came ashore, and to return on board ship any at all suspicious, and my Chief Sanitary Inspector and myself visited the shed at intervals to test his action. All he passed were sound.

The Federal Cold Storage Company gave me a guarantee that none of even that meat so considered sound should be issued from their Keerom Street Stores till a further inspection had been made by me there. When it came to a level where the affected meat was to be expected, I stopped all unloading, and, under the instructions of the Medical Officer of Health for the Colony, I accompanied the Medical Officer of Health, Cape Town, to the Cold Stores to inspect the meat. The Company gave us every facility, and Dr. Anderson and myself cut open and smelt various quarters of meat, which had been most under suspicion, and were quite satisfied that they were perfectly sound. The total quantity landed was then set free. The difficult question remained as to what was to be done with the remainder of the meat still in the ship. As it happened, the Storage people resolved to unload no more here, and the cold chambers were closed up, and the ship proceeded to East London, where the authorities were informed, so that it might be sifted. I may say that the Cold Storage Company were fully covered against loss by insurance, and had no inducement to take the meat if it was the least unsound; the insurance companies, moreover, stated they would not pay any claim, as in their opinion the meat was perfectly sound. The meat was not for issue at Cape Town, but consigned to the Transvaal mines.

Various small parcels of apples, fish, and meat were also condemned and destroyed. I may add that in addition to the vigilance of my Sanitary Staff and staff of Customs Examiners, the Storekeepers and Clerks in the Harbour Board stores are strictly instructed by circular to report at once to me by telephone anything deemed suspicious in the smell or condition of any foodstuffs.

The Board's instructions for dumping at sea are:—Cattle ships cleaning up must go out two miles in a line which runs through Signal Station and end of Breakwater till Robben Island bears N. by W. magnetic. Dead cattle or diseased meat must be dumped outside of a line 10 miles N.W. from Breakwater, where the currents sweep them out to sea.

Cattle Kraal.

The increased consignments of live stock from the Argentine, the crection of the kraal on the South Arm, and the enforcement of the new Government Regulations in regard thereto, have caused much sanitary work. Thus in April, 1905, scab was present among sheep, and recourse was had to the new dipping tank recently provided. After their departure the whole kraal required cleaning; and I communicated with Dr. Hutcheon, who requested me to have the work done for them at the expense of the Agricultural Department. Under an arrangement between the General Manager and the Agricultural Department, the Board's sanitary staff now cleanse the kraal at so much per head of cattle.

Night-Soil Service.

This has, for the last twenty months, been done by the Board's sanitary staff, instead of by a contractor, and the result has been admirable—not a single complaint of nuisance or neglect having been received. Pans in doek area are collected thrice weekly, and the barge takes them out to a point about two miles north-east of break-water, and discharges them while still going. The pans are washed by pump, disinfected and stowed in the well of the barge, covered by turpaulins battened down. The average number of pans dealt with is 7,500 yearly.

The sewage from the water-closets at the restaurant, pier-head and east pier—opened October, 1903, November, 1904, and July, 1905, respectively—is discharged into special Septic tanks of varying construction, the effluents from which flow into the doek. I consider that this system, even without the perfection of filters which are contemplated, has given excellent results; the want of a filter is not so much felt where the outfall leads direct into sea water with a range of currents. Since the Harbour Board started these tanks the system has been adopted in Kimberley, Somerset Strand, private houses in Wynberg and elsewhere; but I think the Board is to be congratulated on being the pioneer of this system of Sewage disposal in South Africa.

Foreshores and Rogge Beach.

The bounds of the Table Bay Harbour Board's jurisdiction are “Northward by a straight line running Eastward from the Green Point Lighthouse through the Mouille Point Lighthouse and prolonged to the Eastern shores of Table Bay, thence Southward along Highwater mark, so as to include the foreshore to the Castle Light; thence back to Mouille Point Lighthouse, including the foreshore, wharves, docks, basins, jetties, and harbour works, and all land vested in the Harbour Board by title deed or otherwise.”

As a matter of fact the Local Authorities from Woodstock round to Blaauwberg are wont to exercise sanitary control of the Beach in their neighbourhood, but the Board's Sanitary Inspectors inspect the foreshore daily from Mouille Point to Woodstock. In this area falls Rogge Bay Beach and the ground reclaimed by tipping. In May, 1905, complaints were made regarding both Tips and Beach. All manner of rubbish, such as paper, straw, horse manure, old tins, animal and vegetable rubbish, old rags, mattresses, fish heads, crayfish shells, and green garden refuse was dumped on the Tips, and was frequently set fire to, thus creating a smoke nuisance, the measures taken resulted in the abatement of the nuisance.

Rogge Bay Beach.—Offal of fish and fish were deposited here, and the place became very unsavoury. The fishermen resented the interference of the Board's Officials at one time and of the Town Officials at another; finally a scheme has been agreed upon whereby the Corporation exercise Sanitary control of the Beach. The Corporation placed the Beach in good order, removing many cart loads of rubbish. The attitude of the Board's Officials is now restricted to inspection and report, any further steps being taken by the Corporation. Some of the habitués of the Beach still, unless constantly called to book, revert to their objectionable practices of depositing fish offal.

Generally, I consider that both the foreshore and the other parts of the Board's sanitary area are maintained in an exceedingly good condition.

J. P. MACLAREN, M.B., B.Sc.,

Port Health Officer at Table Bay.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."
Government and State-aided Hospitals and Kindred Institutions.

TABLE I.
RETURN of Patients treated during the year ended 31st December, 1904.

INSTITUTION.	Nominal No. of Beds.	No. of In-patients treated during year.			Class of In-patients.			Average No. of Patients treated per bed during year.	Average total No. of days each bed was occu- pied dur- ing year.	Average daily No. of In- patients.	Total No. of daily units during year.		Average stay of Patients in days.	Case Mor- tality per cent.	Out- Patients: No. of Attend- ances.
		Euro- pean.	Coloured.	Total.	Free.	Paying or contri- buting.	Govern- ment Chronic Sick and others.				Euro- pean.	Coloured or Na- tive.			
A. State-Aided. COLONY PROPER.															
Albany— Albany General Hospital	80	217	177	394	340	54	..	4.92	127.52	27.87	6,286	3,916	25.89	10.91	630
Barkly West (a)— Barkly West Hospital	12	13	25	38	35	3	..	3.17	85.08	4.77	400	621	26.87	2.63	..
Cape— Somerset Hospital	191	1,496	602	2,098	1,752	346	..	10.98	312.97	163.32	41,918	17,859	28.49	8.72	5,844
Suburban Hospital, Woodstock	23	200	48	248	103	145	..	10.78	267.74	16.82	5,272	886	24.83	11.29	45
Rondebosch and Mowbray Cottage Hospital	28	176	75	251	66	185	..	8.96	208.71	15.97	4,298	1,546	23.28	11.15	..
Victoria Cottage Hospital, Wynberg	33	285	130	415	148	267	..	12.58	352.58	31.79	7,606	4,029	28.04	12.05	..
Eaton Convalescent Home, Plumstead	43	459	35	494	433	61	..	11.48	254.65	29.92	10,524	426	22.17	0.20	..
Cape Town Free Dispensary	..	..	..	..	(b) 383	..	..	..	..	..	..	..	..	(c) 23.00	12,128
Cradoek— Queen's Central Hospital	49	176	94	270	151	119	..	5.51	186.84	25.01	6,435	2,720	33.90	15.55	11
East London— Frere Hospital	52	435	193	628	344	284	..	12.08	217.15	30.85	7,830	3,462	17.98	10.99	832
Graaff-Reinet— Midland Hospital	41	64	86	150	101	49	..	3.66	102.56	11.49	1,610	2,595	28.03	14.67	913
Kimberley— Kimberley Hospital	318	971	1,106	2,077	714	(d) 1,157	(e) 206	6.53	195.11	169.52	23,815	38,230	29.87	12.61	1,625
Maifeking— Victoria Hospital	35	136	45	181	1	146	34	5.17	86.94	8.31	2,229	814	16.81	6.08	..
Oudtshoorn— Royal South-Western Hospital	29	37	55	92	66	26	..	3.17	78.21	6.20	729	1,539	24.65	17.39	11
Port Elizabeth— Provincial Hospital	156	1,061	506	1,567	1,033	358	176	10.04	276.45	117.83	29,339	13,787	27.52	8.87	7,047
Victoria Memorial Home	14	11	..	11	2	5	4	0.79	99.29	3.80	1,390	..	126.36	..	..
Queenstown— Frontier Hospital	64	139	91	230	133	72	25	3.59	113.48	19.84	5,031	2,232	31.58	13.91	89
Uitenhage (f)— Uitenhage Cottage Hospital	32	60	17	77	17	60	..	2.41	42.75	7.43	1,205	163	17.77	3.90	..
Victoria East— Victoria Hospital, Lovedale	16	8	228	236	59	173	4	14.75	236.00	10.32	358	3,418	16.00	1.69	7,192
Vryburg— Vryburg Hospital	16	64	21	85	7	78	..	5.31	104.06	4.55	1,418	247	19.59	1.18	..
NATIVE TERRITORIES.															
Butterworth— Butterworth Cottage Hospital	13	16	38	54	29	25	..	4.15	131.08	4.66	422	1,282	31.55	9.26	..
Mount Currie— East Griqualand and Usher Memorial Hospital, Kokstad	22	50	62	112	23	89	..	5.09	137.50	8.26	989	2,036	27.01	8.04	..
Umtata— Umtata Cottage Hospital	15	23	175	198	144	54	..	13.20	310.47	12.72	1,261	3,396	23.52	6.56	..
Total	1,282	6,097	3,809	9,906	(g) 5,701	3,756	449	7.73	207.15	731.25	160,365	105,204	26.81	(h) 11.01	36,367
B. Government Institutions. COLONY PROPER.															
Albany— Chronie Sick Hospital	174	163	59	222	..	20	202	1.27	356.34	169.41	45,736	16,267	279.29	10.36	..
Cape— Old Somerset Hospital	430	309	314	623	..	69	554	1.45	230.88	271.26	46,903	52,377	159.36	20.87	..
King William's Town— Grey Hospital	70	141	397	538	436	102	..	7.69	234.97	44.94	5,755	10,693	30.57	11.90	5,981
Total	674	613	770	1,383	436	191	756	2.05	263.69	485.61	98,394	79,337	128.51	15.69	5,981

(a) For seven months ended 31st December, 1904.
(b) Patients visited in their own homes.
(c) Of patients attended in their own homes.

(d) 333 of these patients paid the Hospital Tax only.
(e) Contagious Diseases Prevention Act patients.
(f) For six months ended 31st December, 1904.

(g) This figure does not include the 333 patients visited in their own homes by the Medical Officer in charge of the Cape Town Free Dispensary.
(h) Case Mortality per cent. does not include Cape Town Free Dispensary patients.

ANNEXURE "B."
Government and State-aided Hospitals and Kindred Institutions.

TABLE I.

RETURN of Patients treated during the year ended 31st December, 1905.

INSTITUTION.															
Nominal No. of Beds.	No. of In-patients treated during year.			Class of In-patients.			Average No. of Patients treated per bed during year.	Average total No. of days each bed occupied during year.	Average daily No. of In-patients.	Total No. of daily units during year.		Average stay of Patients in Days.	Case Mortality per cent.	Out-patients: No. of Attendances.	
	European.	Coloured.	Total.	Free.	Paying or Contributing.	Government, Chronic Sick and others.				European.	Coloured or Native.				
A. State-Aided. COLONY PROPER.															
Albany—	80	219	219	438	361	77	..	5.47	157.69	34.56	6,173	6,442	28.80	7.76	1,312
Albany General Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barkly West—	13	33	29	62	45	17	..	4.77	99.77	3.55	686	611	20.92	8.06	..
Barkly West Convalescent Home ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape—	191	1,289	688	1,977	1,658	319	..	10.35	281.28	147.19	33,723	20,001	27.17	8.60	8,699
Somerset Hospital ..	23	163	61	224	102	122	..	9.74	225.00	14.18	3,947	1,228	23.10	11.16	35
Suburban Hospital, Woodstock ..	28	141	90	231	106	125	..	8.25	165.21	12.67	2,962	1,664	20.03	11.25	..
Rondebosch and Mowbray Cottage Hospital ..	433	273	145	418	184	195	39	12.67	283.91	25.67	5,752	3,617	22.41	10.05	..
Victoria Cottage Hospital, Wynberg ..	43	296	28	324	251	73	..	7.53	181.95	21.44	7,244	580	24.14	31	..
Eaton Convalescent Home, Plumstead ..	..	..	..	..	(a) 379	..	..	..	..	..	..	..	(b) 26.91	11,114	..
Cape Town Free Dispensary ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Simon's Town Cottage Hospital (c) ..	10	32	16	48	15	32	1	4.80	114.40	4.16	794	350	23.83	6.25	114
Cradoek—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queen's Central Hospital ..	50	134	66	200	116	84	..	4.00	151.74	20.79	5,083	2,504	37.93	11.00	32
East London	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Frere Hospital ..	52	344	185	529	334	195	..	10.17	223.81	31.88	7,850	3,788	22.00	9.64	1,147
Graaff-Reinet—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Midland Hospital ..	41	81	68	149	117	32	..	3.63	108.90	12.23	2,265	2,200	20.97	10.74	1,207
Kimberley—	318	924	1,243	2,167	816	(d) 1141	(e) 210	6.81	215.78	188.00	21,443	47,176	31.20	13.24	1,666
Kimberley Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mafeking—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria Hospital ..	35	84	46	130	4	106	20	3.71	57.00	5.46	1,271	724	15.35	10.77	..
Oudtshoorn—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Royal South-Western Hospital ..	29	69	94	163	124	39	..	5.62	137.86	10.95	1,678	2,320	24.53	7.36	26
Port Elizabeth—	156	929	599	1,528	1,191	326	11	9.79	269.10	115.01	28,421	13,558	27.47	9.16	6,915
Provincial Hospital ..	14	10	..	10	4	3	3	.71	224.79	8.62	3,147	..	314.7	..	..
Victoria Memorial Home ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown—	61	79	93	172	116	54	2	2.82	119.67	20.00	3,353	3,947	42.44	14.53	..
Frontier Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stellenbosch—	16	18	23	41	9	32	..	2.56	57.56	3.00	627	294	22.46	2.44	12
Queen Victoria Memorial Hospital (f) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uitenhage—	32	156	43	199	62	137	..	6.22	163.12	14.30	4,237	983	26.23	6.63	..
Uitenhage Cottage Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria East—	18	..	260	260	34	226	..	14.44	239.28	11.80	..	4,307	16.56	3.46	7,000
Victoria Hospital, Lovedale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vryburg—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vryburg Hospital ..	16	37	16	53	7	46	..	3.31	64.44	2.82	767	264	19.45	9.43	..
NATIVE TERRITORIES.															
Butterworth—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butterworth Cottage Hospital ..	11	27	56	83	33	50	..	7.54	253.45	7.64	974	1,814	33.59	13.25	..
Mount Currie—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
East Griqualand and Usher Memorial Hospital, Kokstad ..	26	61	71	132	24	108	..	5.08	154.19	10.98	1,525	2,484	30.37	10.61	..
Umtata—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Umtata Cottage Hospital ..	18	46	182	228	194	32	2	12.67	335.61	16.55	1,942	4,089	26.49	10.53	..
Total ..	1,314	5,445	4,321	9,766	(g) 5907	3,571	288	7.43	206.10	743.45	145,864	124,955	27.73	(h) 9.83	39,279
B. Government Institutions. COLONY PROPER.															
Albany—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chronic Sick Hospital ..	174	171	62	233	..	19	214	1.34	341.76	162.92	42,789	16,677	255.22	13.30	..
Cape—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Old Somerset Hospital ..	430	387	376	763	..	52	711	1.77	253.28	298.38	53,569	55,341	142.74	18.61	..
King William's Town—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grey Hospital ..	61	111	406	517	450	67	..	8.47	247.79	41.41	4,428	10,687	29.24	10.25	6,380
Total ..	665	669	844	1,513	450	138	925	2.27	275.93	502.71	100,786	82,705	121.28	14.94	6,380

(a) Patients visited in their own homes. (b) Of Patients attended in their own homes. (c) Opened 1st April, 1905. (d) 392 of these Patients paid the Hospital Tax only. (e) Contagious Diseases-Prevention Act Patients. (f) First Patient admitted on 27th February. (g) This Figure does not include the 379 Patients treated in their own homes by the Medical Officer in charge of the Cape Town Free Dispensary. (h) Case Mortality per cent. does not include Cape Town Free Dispensary Patients. (i) Towards the end of the year the number of beds was increased to 49; the additional beds were, however, not used during the period covered by this return.

ANNEXURE "B."

TABLE 2.
RETURN of Staffs at the close of 1905.

INSITUATION.	Nominal No. of Beds.	Daily Average No. of Patients.	Medical Staff.		Administrative Staff.				Nursing Staff.				Domestic Staff.				Others : For Farm, Garden, or Grounds, etc.		Total Whole Time Staff.	No. of Professional Nursing Staff Daily Average No. of Patients.	No. of Professional Nursing Staff Daily Average No. of Patients.	No. of Total Whole Time Staff Per Bed.	No. of Total Whole Time Staff Per Bed.		
			(a) Visiting (unless otherwise stated this Staff is purely honorary).	Resident or Whole Time.	Secretary.		Clerks and Others.	Dispensers.	Matron.	Senior Nurses.	Junior Nurses and Probationers.	Ward Attendants or Dressers.	Housekeepers and Issuer of Stores.	M.	F.	M.	F.	M.						F.	
					Whole Time.	Part Time or in Receipt of Annual Honorarium.																			
A. State-Aided. COLONY PROPER.																									
Albany—	80	34.56	3	1	..	1	..	..	1	3	12	2	..	1	..	3	6	..	2	..	33	.46	.20	.95	.41
Albany General Hospital ..	..	..	1	..	..	1	..	..	1	..	1	..	..	..	..	1	1	..	..	..	4	.56	.15	1.12	.30
Barkly West—	13	3.55	1	..	..	1	..	..	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Barkly West Hospital ..	..	..	1	..	..	1	..	..	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Cape—	191	147.19	12	4	1	1 Hon.	2	2	1	15	39	1	..	1	2	19	6	2	2	7	102	.37	.29	.69	.53
Somers-et Hospital ..	23	14.18	6	..	..	1	..	..	1	1	6	..	..	..	..	1	3	..	..	..	12	.56	.35	.85	.52
Suburban Hospital, Woodstock ..	28	12.67	6	..	..	1	..	..	1	3	3	..	..	..	..	1	3	..	..	..	11	.55	.25	.87	.39
Rondebosch and Mowbray Cottage Hospital ..	23	25.67	9	..	..	1	..	..	1	4	6	..	..	..	..	2	4	..	2	..	19	.43	.33	.74	.57
Victoria Cottage Hospital, Wynberg ..	43	21.44	1	..	..	1	..	..	1	1	..	..	..	..	..	1	3	..	..	..	9	.09	.06	.42	.21
Eaton Convalescent Home, Plumstead ..	..	..	1	..	..	1 Hon.	1 Part Time	1 Part Time	1	1	..	..	..	..	..	..	1	..	..	..	2	..	..	..	..
Cape Town Free Dispensary ..	..	..	1	..	..	1 Hon.	1 Hon.	1 Hon.	1	..	1	..	..	..	..	1	1	..	..	..	4	.48	.20	.96	.40
Simon's Town Cottage Hospital ..	10	4.16	3	..	..	1 Hon.	1 Hon.	1 Hon.	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Grullock—	50	20.79	3	..	..	1	..	..	1	1	6	..	..	..	..	2	7	..	..	..	17	.38	.16	.82	.34
Queen's Central Hospital ..	..	..	..	..	..	1	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
East London—	52	31.88	4 Medical Officers 1 Dentist.	1	..	..	Resident Medical Officer Acts. 1	..	1	3	10	..	..	1	..	2	7	..	..	..	25	.44	.27	.78	.43
Frere Hospital ..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Graaff-Reinet—	41	12.23	3	..	..	1	..	..	1	1	1	1	..	..	..	..	3	..	..	2	10	.24	.07	.82	.24
Midland Hospital..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kimberley—	318	188.00	7	2	1	..	1	1	1	26	20	1	..	1	..	30	16	3	3	7	110	.25	.15	.58	.35
Kimberley Hospital ..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maifeking—	35	5.46	4	..	..	1	..	..	..	1	2	..	..	..	..	2	1	..	..	2	9	.73	.11	1.64	.26
Victoria Hospital ..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria Hospital ..	29	10.95	7	..	..	1	..	..	..	1	2	..	..	..	..	..	3	1 Part Time	1 Part Time	1	9	.36	.14	.82	.31
Royal South-Western Hospital ..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Port Elizabeth—	156	115.01	5 Local Medical Men.	2	1	1 Hon.	1 Hon.	1 Hon.	1	6	29	2	..	1	1	12	11	..	..	2	77	.31	.23	.67	.49
Provineal Hospital ..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Victoria Memorial Home..	14	8.62	7	..	..	1	..	..	..	1	1	..	..	..	..	..	1	..	..	..	4	.35	.21	.46	.29
Queenstown—	61	20.00	7	..	..	1	..	..	..	1	7	..	..	1	..	2	5	..	..	3	20	.45	.15	1.00	.33
Frontier Hospital..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stellenbosch—	16	3.00	4	..	..	1	..	..	..	..	1	..	..	..	..	..	1	..	..	1	4	.67	.12	1.33	.25
Queen Victoria Memorial Hospital ..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uitenhage—	32	14.30	6	..	..	1	..	..	..	2	3	..	..	..	..	2	2	..	..	1	11	.42	.19	.77	.34
Uitenhage Cottage Hospital ..	..	..	..	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria East—	18	11.80	..	1	..	1 Hon.	1 Hon.	1 Hon.	..	..	(b) 4	..	..	..	..	1	2	..	1 Part Time	..	13	.42	.28	1.10	.72
Victoria Hospital, Lovedale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vryburg—	16	2.82	3	..	..	1	..	..	..	1	2	..	..	..	..	2	2	..	..	..	7	1.06	.19	2.49	.44
Vryburg Hospital ..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
NATIVE TERRITORIES.																									
Butterworth—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butterworth Cottage Hospital ..	..	7.64	1	..	..	1	..	..	..	1	1	..	..	..	..	1	2	..	..	..	6	.39	.27	.78	.54
Mount Currie—	26	10.98	4	..	..	1	..	..	..	1	2	..	..	..	..	2	3	..	..	..	9	.36	.15	.82	.35
East Griqualand and Usher Memorial Hospital, Kokstad ..	..	..	..	..	..	1	..	..	..	1	2	..	..	..	..	2	2	..	2	..	10	.24	.22	.60	.55
Umtata—	18	16.55	1	..	..	1	..	..	..	1	1	2	..	..	..	2	2	..	2	..	..	..	..	..	..
Umtata Cottage Hospital ..	..	..	..	..	..	1	..	..	..	1	1	2	..	..	..	2	2	..	2	..	..	..	..	..	..
Total ..	1,314	743.45	102	11	3	21	3	10	24	74	161	7	1	6	3	89	96	..	22	31	537	.35	.20	.72	.41
B. Government Institutions.																									
COLONY PROPER.																									
Albany—	174	162.92	1	..	1 Lay Supt.	..	..	..	..	..	1	8	2	..	1	..	6	..	6	4	30	.05	.05	.18	.17
Chronie Sick Hospital ..	..	..	..	..	..	..	..	..	..	1	2	..	16	16	1	1	1	..	1	..	41	.01	.01	.14	.09
Cape—	430	298.38	..	1	..	..	1	..	1	2	..	16	16	..	1	1	1	..	1	..	..	..	..	..	..
Old Somers-et Hospital ..	..	..	..	1	..	..	..	..	..	1	3	4	2	..	..	..	4	..	5	3	27	.17	.11	.65	.44
King William's Town—	61	41.41	..	1	..	Dispenser Acts. 1	..	1	1	3	3	4	2	..	..	..	..	..	5	3	..	..	..	..	..
Grey Hospital ..	..	..	..	1	..	..	..	..	1	3	11	22	18	1	2	1	11	..	12	7	98	.04	.03	.19	.15
Total ..	665	502.71	1	2	1	..	1	1	2	6	11	22	18	1	2	1	11	..	12	7	..	..	..	..	..

(a) The following Institutions pay their Visiting Medical Officers:—Albany General Hospital, £50 p.a. each; Barkly West Hospital, £100 p.a.; Surburban Hospital, Woodstock, Superintendent receives £100 p.a.; Earton Convalescent Home, Plumstead, £25 p.a.; Cape Town Free Dispensary, £200 p.a.; Midland Hospital, Graaff-Reinet, £50 p.a. each; Frontier Hospital, Queenstown, £105 p.a. each to two Visiting Medical Officers; Umtata Cottage Hospital, £100 p.a.; Albany Chronic Sick Hospital, £200 p.a. and 5% Commission on Fees. (b) Unpaid Learners.

⁴ Towards the end of the year the number of beds was increased to 49; the additional beds were, however, not used during the period covered by this return.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Revenue of State-aided Hospitals and Kindred Institutions during the year ended 31st December, 1904.

TABLE 3.

INSTITUTION.	Nominal Government Grant in aid of Maintenance.		Ordinary Revenue (exclusive of balance from 1903).							Proportion of Total Ordinary Revenue contributed by				
	£ s. d.		Government Grant in aid of Maintenance actually paid	Subscriptions, Donations and Bequests from Public Bodies		Receipts from Paying Patients.	Receipts from other sources.	Total.	General Public.	Paying Patients.	Public Bodies.	Government.	Other sources.	
				£	s. d.									£
COLONY PROPER.														
Albany—	3,250	0 0	3,250	0 0	411	14 1	552	1 6	334	10 5	4,548	6 0	905	7 35
Albany General Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barkly West—	400	0 0	500	0 0	79	17 6	6	18 6	7	10 0	594	6 0	13 44	1 26
Barkly West Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape—	11,000	0 0	11,000	0 0	3,370	11 0	3,716	5 8	1,499	8 1	22,073	3 3	15 27	6 79
Somerset Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Suburban Hospital, Woodstock ..	475	0 0	475	0 0	912	4 8	975	10 0	..	..	2,362	14 8	38 61	20 10
Rondebosch and Mowbray Cottage Hospital ..	450	0 0	450	0 0	1,070	12 3	931	6 3	55	0 0	2,581	18 6	2 90	17 43
Victoria Cottage Hospital, Wynberg ..	800	0 0	800	0 0	1,294	8 4	1,040	0 2	43	10 0	3,227	18 6	40 10	1 55
Eaton Convalescent Home, Plumstead ..	500	0 0	500	0 0	282	12 11	167	13 6	..	..	2,040	0 3	12 87	24 51
Cape Town Free Dispensary ..	200	0 0	200	0 0	381	11 5	135	6 7	1	11 0	743	9 0	51 33	26 90
Gradoek—	1,250	0 0	1,250	0 0	377	4 11	825	3 8	..	..	2,452	8 7	15 38	50 97
Queen's Central Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
East London—	2,500	0 0	2,500	0 0	1,214	11 11	1,167	19 6	189	0 6	5,171	11 11	23 48	48 34
Frederic Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Graaff-Reinet—	1,250	0 0	1,250	0 0	98	1 0	308	16 0	..	..	1,656	17 0	5 92	75 44
Midland Hospital ..	(b)	..	..	..	..	..	..	..	(c)	..	..	..	..	..
Kimberley—	6,936	0 0	6,936	0 0	527	9 3	5,558	6 4	11,887	0 8	25,988	16 3	2 03	45 06
Kimberley Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mateking—	750	0 0	750	0 0	251	1 6	506	8 3	11	2 7	1,618	12 4	15 51	46 33
Victoria Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oudtshoorn—	500	0 0	500	0 0	286	14 11	102	6 0	117	15 0	986	15 11	27 03	50 67
Royal South-Western Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Port Elizabeth—	6,200	0 0	6,200	0 0	1,918	18 1	3,252	3 2	1,141	3 5	12,612	4 8	15 21	49 16
Provincial Hospital ..	175	0 0	175	0 0	989	3 4	119	19 3	235	0 5	1,529	3 0	65 34	11 44
Victoria Memorial Home ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown—	1,250	0 0	1,250	0 0	220	17 5	922	13 6	101	11 0	2,495	1 11	8 85	50 10
Frontier Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uitenhage—	600	0 0	600	0 0	115	7 6	35	15 0	2	16 11	753	19 5	15 30	79 58
Uitenhage Cottage Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria East—	500	0 0	750	0 0	75	2 9	729	0 5	146	1 0	1,700	4 2	4 42	44 11
Victoria Hospital, Lovedale ..	..	..	(d)	..	..	..	..	..	..	..	..	..	..	..
Vryburg—	1,331	0 0	1,331	0 0	Institution entirely maintained by			Government.			1,331	0 0	..	100 00
Vryburg Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
NATIVE TERRITORIES.														
Butterworth—	325	0 0	325	0 0	225	0 0	94	10 6	20	8 4	664	18 10	..	48 88
Butterworth Cottage Hospital ..	..	..	..	..	..	..	..	..	(f)	..	..	..	..	..
Mount Currie—	625	0 0	625	0 0	30	5 3	280	11 3	145	0 0	1,322	17 6	18 30	47 24
East Griqualand and Usher Memorial Hospital, Kokstad ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Umtata—	600	0 0	415	0 0	46	15 8	127	1 0	..	..	927	6 11	5 05	44 75
Umtata Cottage Hospital ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	41,867	0 0	42,032	0 0	5,740	7 10	21,555	16 0	15,918	9 4	99,383	14 7	14 22	42 29
	..	..	..	..	..	..	..	..	..	..	..	..	..	16 02

(a) Includes £60 not actually received, being the interest on Railway Loan deducted from receipts due for Railway Patients.

(c) Includes Hospital Tax, £9,150 8s.; C.D. Patients, £2,061 7s. 6d.; other sources, £655 5s. 2d.

(e) Transkeian General Council.

(f) Native Subscription, Mount Ayliff

(b) Includes Pauper Grant.

(d) Includes £421, receipts from Paying Patients paid into Vote.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

A N N E X U R E “B.”

REVENUE of State-aided Hospitals and Kindred Institutions during the year ended 31st December, 1905.
TABLE 3.

INSTITUTION.	Ordinary Revenue (exclusive of Balance from 1904).										Proportion of Total Ordinary Revenue contributed by								
	Nominal Government Grant in aid of Maintenance.		Government Grant in aid of Maintenance actually paid.				Subscriptions, Donations and Bequests from		Receipts from Paying Patients		Receipts from Other Sources.		Total.	General Public.	Paying Patients.	Public Bodies.	Govern- ment.	Other Sources.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.							
COLONY PROPER.																			
Albany—																			
Albany General Hospital	3,250	0 0	3,250	0 0	..	..	423	6 1	554	9 6	312	11 11	4,540	7 6	9·32	71·58	6·80
Barkly West—																			
Barkly West Hospital	400	0 0	400	0 0	..	..	197	1 3	51	6 0	0	4 0	648	11 3	30·38	61·68	·03
Cape—																			
Somerset Hospital	11,000	0 0	11,000	0 0	876	18 6	4,005	15 11	2,862	16 10	1,446	4 11	20,191	16 2	19·84	54·48	7·16
Suburban Hospital, Woodstock	475	0 0	475	0 0	94	1 0	1,134	15 9	884	5 9	208	4 7	2,796	7 1	40·58	16·99	7·45
Rondebosch and Mowbray Cottage Hospital	450	0 0	450	0 0	127	5 0	1,134	15 9	600	1 2	90	0 0	2,947	0 9	57·00	15·27	3·05
Victoria Cottage Hospital, Wynberg	800	0 0	800	0 0	149	5 6	(a)1,679	14 7	995	18 6	..	..	2,884	15 10	32·57	27·73	..
Eaton Convalescent Home, Plumstead	500	0 0	500	0 0	733	17 1	939	11 10	225	6 0	89	5 6	1,696	4 7	8·71	20·48	5·26
Cape Town Free Dispensary	250	0 0	250	0 0	75	0 0	147	16 0	117	15 8	439	9 8	1,686	5 4	..	28·34	49·81
Simon's Town Cottage Hospital	375	0 0	376	2 2	77	10 0	..	..	85	13 0	..	..	882	5 4	52·89	32·86	..
Graddock—																			
Queen's Central Hospital	1,000	0 0	1,375	0 0	..	..	535	9 4	453	3 0	6	8 11	2,370	1 3	22·59	58·02	0·27
East London—																			
Frere Hospital	2,500	0 0	2,500	0 0	100	0 0	837	16 7	937	14 6	174	0 0	4,549	11 1	18·42	54·95	3·82
Graaff-Reinet—																			
Midland Hospital	1,050	0 0	1,675	0 0	..	..	95	14 3	107	14 6	..	..	1,878	8 9	5·10	89·17	..
Kimberley—																			
Kimberley Hospital	(b)6,936	0 0	6,936	0 0	100	0 0	988	17 6	5,239	16 5	14,858	3 10	28,122	17 9	3·52	24·66	52·83
Mafeking—																			
Victoria Hospital	750	0 0	750	0 0	100	0 0	128	13 6	315	0 9	1	6 6	1,295	0 9	9·94	57·91	·10
Oudtshoorn—																			
Royal South-Western Hospital	500	0 0	500	0 0	100	0 0	317	6 4	89	2 0	120	0 0	1,126	8 4	28·17	44·39	10·65
Port Elizabeth—																			
Provincial Hospital	6,200	0 0	6,200	0 0	..	..	1,776	7 0	2,245	3 1	1,181	11 9	11,403	1 10	15·58	54·37	10·36
Victoria Memorial Home	175	0 0	262	10 0	..	..	704	1 8	75	0 0	210	15 9	1,252	7 5	56·22	20·96	16·83
Queenstown—																			
Frontier Hospital	1,250	0 0	1,250	0 0	..	..	456	19 10	464	10 0	515	4 9	2,686	14 7	17·01	46·52	19·18
Stellenbosch—																			
Queen Victoria Memorial Hospital	300	0 0	300	0 0	..	..	442	15 5	123	18 9	0	2 0	866	16 2	51·08	34·61	0·01
Uitenhage—																			
Uitenhage Cottage Hospital	1,200	0 0	1,200	0 0	..	..	205	19 0	610	11 6	..	..	2,016	10 6	10·21	59·51	..
Victoria East—																			
Victoria Hospital, Lovedale	500	0 0	500	0 0	..	..	201	15 6	445	10 4	111	4 6	1,258	10 4	16·03	39·73	8·84
Vryburg—																			
Vryburg Hospital	1,400	0 0	(d)1,166	13 4	..	..	..	..	94	7 2	..	..	1,261	0 6	..	92·52	..
NATIVE TERRITORIES.																			
Butterworth—																			
Butterworth Cottage Hospital	325	0 0	325	0 0	(e)475	0 0	4	4 0	246	14 6	22	10 4	1,073	8 10	·39	30·28	2·10
Mount Currie—																			
East Griqualand and Usher Memorial Hospital, Kokstad	500	0 0	625	0 0	..	Transkeian Gen Council	102	5 11	394	8 4	215	17 4	1,337	11 7	7·61	46·73	16·14
Umtata—								..											
Umtata Cottage Hospital	700	0 0	700	0 0	400	0 0	142	0 0	128	2 9	..	..	1,370	2 9	10·34	51·09	..
Total																			
	42,786	0 0	43,766	5 6	3,408	17 1	16,073	16 3	18,348	10 0	20,003	6 3	101,600	15 1	15·82	43·08	19·69

(a) Includes Legacies to the amount of £812 0s. 9d. which have been used for Maintenance purposes.

(b) Including Pauper Grant.

(c) Includes Hospital Tax, £91,911 1s.; C.D. Patients, £2,313 15s.; and "Other Sources," £633 7s. 10d.

(d) Amount contributed by Government since 1st March, when the administration of the Hospital was handed over to a Provisional Board. During the first two months of 1905, £233 6s. 8d. was contributed by the Government, and £32 12s. 6d. was received from Paying Patients.

(e) Including £75, balance unpaid during 1904, and £100 forming the increased Grant of £100 p.a.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-aided Hospitals and Kindred Institutions.

TABLE 4.

RETURN of Ordinary Expenditure during the Year ended 31st December, 1904.

INSTITUTION.	Salaries and Wages to Staff (exclusive of fees to Visiting Medical Officers).	Visiting Medical Officers' Fees.	Provisions and Supplies to Patients and Staff.	Stimulants.	Medicines Dressings and Instruments (including those supplied to Out-Patients).	Bedding, House-linen, etc.	Furniture and Repairs.
	1	2	3	4	5	6	7
<i>A. State-Aided</i>		2	3	4	5	6	7
COLONY PROPER.							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Albany—							
Albany General Hospital	1,382 9 6	150 0 0	1,728 4 2	39 6	515 15 10	125 12 7	180 10 8
Barkly West—							
Barkly West General Hospital	66 9 3	78 1 10	81 12 11	1 0 0	..	0 4 0	0 2 6
Cape—							
Somerset Hospital	7,067 7 10	..	7,454 19 9	185 7 4	1,508 3 5	551 8 3	1,385 1 9
Suburban Hospital, Woodstock	437 0 0	100 0 0	765 10 7	Included in 3	238 17 1	114 10 9	Included in 6
Rondebosch and Mowbray Cottage Hospital	615 3 9	..	783 0 6	Included in 3	568 3 9	50 12 6	181 13 6
Victoria Cottage Hospital, Wynberg	764 2 8	..	1,038 5 10	Included in 5	508 3 0	15 5 7	118 11 7
Eaton Convalescent Home, Plumstead	601 10 6	25 0 0	926 14 11	1 10 9	33 14 1	43 6 8	182 9 10
Cape Town Free Dispensary	221 0 0	200 0 0	3 14 5	..	247 3 5	..	9 11 0
Craddock—							
Queen's Central Hospital	629 1 1	..	1,285 0 6	..	241 7 10	64 13 0	61 8 3
East London—							
Frere Hospital	1,284 9 2	..	1,373 14 0	105 11 10	300 7 7	50 3 2	148 16 5
Graaff-Reinet—							
Midland Hospital	546 7 0	150 0 0	590 14 3	Included in 5	168 8 9	33 12 4	184 11 5
Kimberley—							
Kimberley Hospital	6,858 14 1	..	7,355 7 11	463 8 11	930 14 3	165 7 1	632 3 3
Mafeking—							
Victoria Hospital	638 19 5	..	532 1 1	3 14 11	108 2 8	15 4 1	41 10 11
Oudtshoorn—							
Royal South-Western Hospital	318 2 4	..	441 19 11	Included in 3	69 15 0	Included in 8	53 2 10
Port Elizabeth—							
Provincial Hospital	3,867 6 3	..	4,101 14 8	220 13 2	617 5 1	165 2 7	862 12 1
Victoria Memorial Home	136 19 0	..	133 15 5	..	3 18 2	..	11 13 4
Queenstown—							
Frontier Hospital	797 1 9	210 0 0	1,141 15 2	30 17 1	137 8 2	..	284 3 11
Uitenhage—							
Uitenhage Cottage Hospital	202 1 10	..	250 12 10	Included in 3	40 13 9	..	..
Victoria East—							
Victoria Hospital, Lovedale	448 12 9	..	287 4 7	Included in 5	325 8 6	6 17 7	4 18 11
Vryburg—							
Vryburg Hospital	240 9 4	..	(c) 877 5 10	40 16 0	52 8 9	(d)	(d)
NATIVE TERRITORIES.							
Butterworth—							
Butterworth Cottage Hospital	170 5 10	..	221 0 7	8 3 6	77 13 3	25 17 0	85 0 0
Mount Currie—							
East Griqualand and Usher Memorial Hospital, Kokstad	323 2 1	..	427 16 2	22 9 11	72 4 11	34 19 2	104 13 10
Umtata—							
Umtata Cottage Hospital	382 3 8	..	399 0 7	15 12 6	99 4 7	8 17 5	34 5 9
Total	27,998 19 1	913 1 10	32,201 6 7	1,138 15 5	6,865 1 10	1,471 13 9	4,567 1 9
B. Government Institutions.							
COLONY PROPER.							
Albany—							
Chronic Sick Hospital	1,981 8 0	219 3 4	2,852 1 5	108 5 8	22 1 8	28 12 6	13 4 8
Cape—							
Old Somerset Hospital	3,607 9 6	..	4,968 1 2	Included in 3	371 11 3	840 0 9	435 0 8
King William's Town—							
Grey Hospital	1,702 4 5	..	1,486 1 11	11 6 3	113 4 10	69 1 10	63 17 8
Total	7,291 1 11	219 3 4	9,306 4 6	119 11 11	506 17 9	937 15 1	512 3 0

(a) Includes amount paid for Electric Repairs.

(b) Includes £60, Interest on Railway Loan of £150 .

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-aided Hospitals and Kindred Institutions.

TABLE 4.

RETURN of Ordinary Expenditure during the Year ended 31st December, 1904.

Clothing and Uniforms.	Washing.	Funerals.	Sanitary.	Lighting.	Fuel.	Printing, Stationery, etc.	Insurance, Interest, etc.	Miscellane- ous.	Total Ordinary Expenditure.
8	9	10	11	12	13	14	15	16	
£ s. d.	£ s. d.	£ . d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
146 6 3	84 4 6	35 0 0	72 13 0	77 6 4	65 10 6	79 1 8	28 13 11	13 6 0	4,724 4 5
..	10 10 0	..	2 10 0	3 19 11	6 0 0	2 2 9	..	12 4 7	264 17 9
155 7 10 38 3 6 29 13 7 33 16 5	1,663 10 10 208 19 0 195 9 8 111 4 7 61 2 3 ..	214 11 6 9 13 6 .. 37 18 5	168 18 4 1 12 0 ..	(a)503 14 1 259 0 0 267 5 10 118 5 0 67 2 7 16 7 3	731 0 9 Included in 12 Included in 12 97 4 0 Included in 12 Included in 12	228 11 2 16 19 9 .. 36 7 2 17 16 4 17 9 9	Included in 16 7 0 0 113 14 3 39 14 7 165 3 3 2 8 0	545 3 1 107 0 0 205 14 1 73 2 6 47 13 5 92 13 11	22,363 5 11 2,302 14 2 3,010 11 5 2,992 1 4 2,174 16 7 810 7 9
20 0 0	89 15 0	43 15 0	..	324 10 8	Included in 12	34 15 7	(b)103 12 1	13 4 0	2,911 3 0
175 10 1	276 0 0	33 3 0	85 2 0	130 17 6	100 6 8	46 16 0	19 12 6	157 12 3	4,288 2 2
Included in 6	47 2 6	2 10 0	..	17 19 0	Included in 12	12 19 5	Included in 16	31 18 3	1,786 2 11
150 10 4	1,380 0 0	72 8 0	575 18 1	668 0 8	830 16 1	106 16 7	109 4 6	599 16 3	20,899 6 0
48 10 7	132 0 0	..	88 16 6	45 9 6	56 5 9	24 6 0	35 12 0	101 1 1	1,871 14 6
43 7 3	28 7 0	..	..	73 17 4	Included in 12	14 9 0	8 0 0	142 0 0	1,193 0 8
169 15 3 ..	678 9 0 2 16 5	56 2 0 ..	38 3 4 6 19 6	647 5 11 32 4 11	198 7 3 Included in 12	173 1 0 9 18 3	80 12 8 31 3 3	355 17 5 45 2 0	12,232 7 8 414 10 3
1 4	184 18 6	19 6 0	42 15 0	171 17 2	Included in 12	24 1 4	20 11 9	63 3 1	3,130 0 3
..	32 2 11	2 0 0	13 10 0	23 11 7	15 10 0	7 8 0	..	10 3 1	597 14 0
Included in 6	Included in 1	..	Included in 1	28 5 3	Included in 12	Included in 16	16 16 11	271 7 8	1,389 12 2
37 0 0	36 0 0	..	13 15 0	39 12 9	52 1 5	..	..	46 9 0	1,435 18 1
..	11 19 3	9 10 0	1 0 0	Included in 3	30 18 9	10 11 9	..	21 4 3	673 4 2
..	57 10 0	12 10 0	13 18 0	..	40 0 0	21 11 9	11 14 0	26 0 9	1,168 10 7
..	29 11 0	11 7 0	13 3 10	34 14 5	Included in 12	10 6 9	4 7 0	11 4 1	1,053 18 7
1,050 2 5	5,321 12 5	559 14 5	1,138 14 7	3,551 7 8	2,224 1 2	895 10 0	798 0 8	2,993 0 9	93,688 4 4
49 6 8	56 7 0	41 10 0	97 13 6	163 0 5	271 7 2	..	..	225 9 3	6,129 11 3
203 0 7	758 0 6	316 4 0	71 3 3	787 16 11	Included in 12	..	..	20 16 7	12,379 5 2
39 8 0	92 0 7	46 17 0	66 0 0	55 11 6	190 11 4	..	Insurance de- frayed by P.W. Dept.	478 18 5	4,415 3 9
291 15 3	906 8 1	404 11 0	234 16 9	1,006 8 10	461 18 6	..	..	725 4 3	22,924 0 2

(c) Includes Ration Allowance to Staff,
(d) Provided Departmentally.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-aided Hospitals and Kindred Institutions.

TABLE 4.

RETURN of Ordinary Expenditure during the year ended 31st December, 1905.

INSTITUTION.				Salaries and Wages to Staff (exclusive of Fees to Visiting Medical Officers).	Visiting Medical Officers' Fees.	Provisions and Supplies to Patients and Staff.	Stimulants.	Medicines, Dressings, and Instruments (including those supplied to Out-patients).	Bedding, House-linen, etc.	Furniture and Repairs.
				1	2	3	4	5	6	7
<i>State-Aided.</i>										
COLONY PROPER.				£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Albany—										
Albany General Hospital ..	..	..	..	1,327 12 11	150 0 0	1,728 11 5	60 19 2	447 13 6	71 16 4	167 1 11
Barkly West—										
Barkly West Hospital ..	..	..	..	129 0 11	100 0 0	164 4 10½	1 5 0	7 18 4	3 4 6	2 11 7
Cape—										
Somerset Hospital ..	..	..	..	7,079 19 6	..	6,439 2 10	123 0 5	1,983 15 9	448 7 0	1,079 10 4
Suburban Hospital, Woodstock ..	..	..	..	429 9 6	100 0 0	649 10 2	Included in 3	236 8 0	34 10 0	26 9 6
Rondebosch and Mowbray Cottage Hospital ..	..	..	..	514 3 6	..	642 12 5	Included in 3	224 3 4	11 7 9	135 1 10
Victoria Cottage Hospital, Wynberg ..	..	..	..	770 3 0	..	917 11 7	Included in 5	294 16 10	73 0 7	155 4 6
Eaton Convalescent Home, Plumstead ..	..	..	..	522 15 8	25 0 0	619 11 1	2 11 3	28 6 10	24 8 2	93 18 0
Cape Town Free Dispensary ..	..	..	..	233 3 4	200 0 0	..	..	262 5 0	..	19 7 11
Simon's Town Cottage Hospital..	..	..	..	134 13 2	..	172 14 0½	Included in 3	112 8 8	42 15 2	75 0 4
Craddock—										
Queen's Central Hospital ..	..	..	..	493 6 0	..	848 13 4	Included in 3	175 15 5	110 7 4	24 6 3
East London—										
Frere Hospital ..	..	..	..	1,506 6 8	..	1,253 10 8	58 13 1	336 8 11	62 3 6	406 3 5
Graaff-Reinet—										
Midland Hospital ..	..	..	..	344 14 8	150 0 0	550 16 9	Included in 5	193 6 9	44 17 3	55 9 3
Kimberley—										
Kimberley Hospital ..	..	..	..	7,095 2 9	..	7,440 8 3	458 8 0	1,036 3 10	224 14 2	911 10 7
Mafeking—										
Victoria Hospital ..	..	..	..	452 19 8	..	258 9 4	7 17 8	66 4 2	20 18 6	104 12 5
Oudtshoorn—										
Royal South-Western Hospital ..	..	..	..	343 2 10	..	560 9 3	Included in 5	83 7 1	Included in 8	78 0 6
Port Elizabeth—										
Provincial Hospital ..	..	..	..	3,628 4 9	..	4,103 2 10	179 18 5	414 6 10	257 14 7	726 12 10
Victoria Memorial Home ..	..	..	..	129 10 0	..	167 15 2	..	1 13 4	..	9 15 7
Queenstown—										
Frontier Hospital ..	..	..	..	705 13 7	210 0 0	938 10 3	23 2 4	133 14 3	4 4 0	257 14 2
Stellenbosch—										
Queen Victoria Memorial Hospital ..	..	..	..	168 17 8	..	182 12 2	1 9 0	49 3 1	52 13 4	..
Uitenhage—										
Uitenhage Cottage Hospital ..	..	..	..	487 12 6	..	580 14 3	37 13 2	201 10 8	..	48 6 11
Victoria East—										
Victoria Hospital, Lovedale ..	..	..	..	491 7 5	..	276 2 11	Included in 5	259 6 2	14 17 4	79 12 9
Vryburg—										
Vryburg Hospital ..	..	..	..	319 9 6	..	(a) 618 1 5½	Included in 3	64 12 7	15 18 4	25 9 5
NATIVE TERRITORIES.										
Butterworth—										
Butterworth Cottage Hospital ..	..	..	..	153 12 6	..	281 6 8	7 8 0	153 15 8	42 5 6	41 13 6
Mount Currie—										
East Griqualand and Usher Memorial Hospital, Kokstad ..	..	..	..	340 10 5	..	438 2 9	21 8 6	103 11 11	65 14 9	57 5 11
Umtata—										
Umtata Cottage Hospital ..	..	..	..	279 18 9	100 0 0	421 0 7	Included in 3	204 2 10	20 6 0	51 8 4
Total ..	..	..	..	28,081 11 2	1,035 0 0	30,253 15 0½	983 14 0	7,074 19 9	1,646 4 1	4,632 7 9
B. Government Institutions.										
COLONY PROPER.										
Albany—										
Chronic Sick Hospital ..	..	..	..	1,982 10 4	219 9 8	2,535 7 4	117 1 5	82 5 9	30 12 8	138 10 7
Cape—										
Old Somerset Hospital ..	..	..	..	3,540 18 8	..	4,433 5 5	Included in 3	388 17 5	720 18 10	328 14 3
King William's Town—										
Grey Hospital ..	..	..	..	1,628 12 5	..	1,203 5 0½	5 19 8	108 17 1	69 16 1	55 2 10
Total ..	..	..	..	7,152 1 5	219 9 8	8,171 17 9½	123 1 1	580 0 3	821 7 7	522 7 8

(a) Includes Ration Allowance to Staff.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-aided Hospitals and Kindred Institutions.

TABLE 4.

RETURN of Ordinary Expenditure during the year ended 31st December, 1905.

Clothing and Uniforms.	Washing.	Funerals.	Sanitary.	Lighting.	Fuel.	Printing, Stationery, etc.	Insurance, Interest, etc.	Miscel- laneous.	Total Ordinary Expenditure.
8	9	10	11	12	13	14	15	16	
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
84 5 4	85 7 6	29 16 0	80 4 0	89 18 1	70 11 0	65 12 9	36 0 6	74 13 1	4,570 3 6
..	23 10 0	..	..	7 2 4½	18 0 0	6 19 6	..	32 12 8	496 9 9
122 1 11	1,586 8 9	163 11 6	133 5 9	478 15 4	668 6 9	248 18 0	429 5 1	25 0 0	21,009 8 11
..	160 18 11	..	..	282 0 2	Included in 12	Included in 16	Included in 16	137 19 7	2,057 5 10
39 10 6	157 8 8	..	..	171 5 4	Included in 12	..	124 11 9	219 6 8	2,239 11 9
27 17 7	107 9 1	25 5 0	..	95 13 9	85 12 3	45 1 5	39 18 0	55 18 6	2,693 12 1
..	51 1 7	..	..	10 12 1	47 10 0	25 14 8	114 9 6	16 4 2	1,582 3 0
..	..	..	..	16 12 6	..	27 7 1	4 5 6	90 18 2	853 19 6
..	32 18 8	..	..	30 0 11½	Included in 12	27 11 4	3 18 0	10 5 9	642 6 1
Included in 6	85 14 6	31 10 0	..	270 8 3	Included in 12	34 8 11	14 0 0	713 9 3	2,801 19 3
188 18 1	360 0 0	28 17 6	82 13 6	127 10 6	103 7 6	66 1 0	19 17 0	118 6 4	4,718 17 8
Included in 6	51 17 9	19 10 0	18 5 3	24 12 0	Included in 12	17 19 11	Included in 16	36 3 9	1,507 13 4
200 10 5	1,380 0 0	30 5 0	572 16 6	677 18 3	940 17 8	93 18 9	123 0 3	614 11 4	21,800 5 9
35 17 1	90 12 6	..	43 1 0	37 1 5	16 17 9	20 3 6	20 19 0	55 9 8	1,231 3 8
28 0 11	36 11 1	0 14 6	..	58 12 11	Included in 12	36 14 4	9 13 0	162 1 11	1,397 8 4
59 7 9	644 5 2	51 13 6	13 13 0	873 2 11	Included in 12	168 16 6	75 4 7	414 12 4	11,610 16 0
..	4 13 11	..	23 3 6	15 3 9	14 17 9	17 17 11	6 10 3	15 7 6	406 8 8
..	155 4 1	29 15 0	42 0 0	154 13 8	Included in 12	22 5 4	20 11 9	82 2 11	2,779 11 4
Included in 6	28 4 8	..	3 6 0	6 19 10	6 18 0	20 15 9	39 18 9	..	560 17 6
..	114 0 10	8 0 0	48 17 6	50 0 4	52 3 0	24 15 2	88 8 0	54 18 4	1,797 0 8
Included in 6	Included in 1	..	Included in 1	32 4 1	Included in 12	Included in 16	19 11 8	101 18 0	1,275 0 4
35 0 0	36 0 0	6 0 0	13 10 0	86 9 11	Included in 12	33 19 4	..	48 16 1½	1,303 6 8
..	18 19 6	35 15 0	6 0 6	21 0 0	Included in 12	19 11 4	..	59 16 6	841 4 8
..	57 15 0	8 10 0	18 18 4	Included in 3	Included in 3	42 5 10	11 18 11	70 15 6	1,236 17 10
Included in 5	30 19 6	15 13 1	21 1 6	Included in 3	34 2 0	..	2 15 0	11 14 1	1,193 1 8
821 9 7	5,300 1 8	484 16 1	1,120 16 4	3,617 18 5	2,059 3 8	1,066 17 7	1,204 16 6	3,223 2 1½	92,606 13 9
588 7 7	47 14 7	52 12 6	109 16 6	118 15 9	252 1 2	..	..	211 2 9	6,486 8 7
217 11 5	746 5 9	327 15 6	50 16 11	870 9 9	Included in 12	..	..	47 19 9	11,673 13 8
Included in 6	132 8 9	53 2 0	70 0 0	48 5 6	156 7 0	..	..	231 17 7½	3,763 14 0
805 19 0	926 9 1	433 10 0	230 13 5	1,037 11 0	408 8 2	..	..	491 0 1½	21,923 16 3

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-Aided Hospitals and Kindred Institutions.

TABLE 5.

Return of Average Cost per Patient during the year ended 31st December, 1904.

INSTITUTION.	Average Daily Cost per Patient.							Proportion of Average daily cost of Patients borne by:—	
	Salaries and Wages to Staff.	Provisions and Supplies to Patients and Staff.	Stimulants.	Fuel and Light.	Medicines and Instruments.	Other Items.	Total.	Ordinary Sources of Revenue.	Government. ^a
	1	2	3	4	5	6			
<i>A.—State Aided.</i>									
COLONY PROPER.									
Albany—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Albany General Hospital	2 8.52	3 4.66	0 0.93	0 3.36	1 0.3	1 9.54	9 3.14	2 7.72	6 7.42
Barkly West—									
Barkly West Hospital	1 3.62	1 7.19	0 0.24	0 2.36	..	2 0.86	5 2.27	0 10.32	4 3.95
Cape—									
Somerset Hospital	2 4.38	2 5.93	0 0.74	0 4.96	0 6.06	1 7.72	7 5.79	3 9.04	3 8.75
Suburban Hospital, Woodstock ..	1 5.03	2 5.84	Included in 2.	0 10.09	0 9.31	1 11.47	7 5.74	5 11.70	1 6.04
Rondebosch and Mowbray Cottage Hospital	2 1.26	2 8.16	Included in 2.	0 10.98	1 11.33	2 7.90	10 3.63	8 6.08	1 9.55
Victoria Cottage Hospital, Wynberg.	1 3.76	1 9.42	Included in 5.	0 4.44	0 10.48	0 9.61	5 1.71	3 10.42	1 3.29
Eaton Convalescent Home, Plumstead	1 1.18	1 8.31	0 0.03	0 1.47	0 0.74	0 11.93	3 11.68	2 11.98	0 11.68
Cape Town Free Dispensary ..	0 4.24	0 0.07	..	0 0.31	0 4.74	0 6.18	1 3.54	0 11.36	0 4.18
Cradock—									
Queen's Central Hospital	1 4.49	2 9.69	..	0 8.51	0 6.33	0 11.30	6 4.32	3 1.42	3 2.90
East London—									
Frere Hospital	2 3.30	2 5.20	0 2.24	0 4.91	0 6.38	1 9.10	7 7.13	3 11.08	3 8.05
Graaff-Reinet—									
Midland Hospital	2 7.18	2 9.71	Included in 5.	0 1.03	0 9.61	2 2.41	8 5.94	2 1.03	6 4.91
Kimberley—									
Kimberley Hospital	2 2.53	2 4.45	0 1.79	0 5.80	0 3.60	1 2.67	6 8.84	4 11.27	1 9.57
Mafeking—									
Victoria Hospital	4 2.40	3 5.96	0 0.29	0 8.93	0 8.53	3 2.41	12 3.62	6 7.22	5 8.40
Oudtshoorn—									
Royal South-Western Hospital ..	2 9.66	3 10.77	Included in 5.	0 7.82	0 7.38	2 6.61	10 6.24	5 2.28	5 3.96
Port Elizabeth—									
Provincial Hospital	1 9.52	1 10.82	0 1.22	0 4.70	0 3.45	1 2.36	5 8.07	2 10.61	2 9.46
Victoria Memorial Home	1 11.65	1 11.10	..	0 5.57	0 0.67	1 6.58	5 11.57	5 3.38	0 8.19
Queenstown—									
Frontier Hospital	2 2.34	3 1.73	0 1.02	0 5.68	0 4.54	2 4.12	8 7.43	4 3.61	4 3.82
Uitenhage—									
Uitenhage Cottage Hospital ..	2 11.45	3 7.97	Included in 2.	0 6.86	0 7.14	0 11.44	8 8.86	1 9.41	6 11.45
Victoria East—									
Victoria Hospital, Lovedale ..	2 4.51	1 6.26	Included in 5.	0 1.80	1 8.68	1 7.07	7 4.32	4 1.36	3 2.96
Vryburg—									
Vryburg Hospital	2 10.66	10 6.46	0 5.88	1 1.22	0 7.56	1 7.20	17 2.98	..	17 2.98
NATIVE TERRITORIES.									
Butterworth—									
Butterworth Cottage Hospital ..	1 11.98	2 7.13	0 1.15	† 0 4.36	0 10.94	1 11.26	7 10.82	4 0.48	3 10.34
Mount Currie—									
East Griqualand and Usher Memorial Hospital, Kokstad	2 1.64	2 9.94	0 1.79	0 3.17	0 5.73	1 10.44	7 8.71	4 0.91	3 7.80
Umtata—									
Umtata Cottage Hospital	1 7.70	1 8.56	0 0.80	0 1.79	0 5.11	0 6.35	4 6.31	2 6.01	2 0.30
Total average ..	2 1.10	2 5.10	0 1.03	0 5.20	0 5.98	1 5.52	(c) 6 11.93	4 0.34	2 11.59
<i>B.—Government Institutions.</i>									
COLONY PROPER.									
Albany—									
Chronic Sick Hospital	0 7.67	0 11.04	0 0.42	0 1.68	0 0.09	0 2.83	1 11.73	..	1 11.73
Cape—									
Old Somerset Hospital	0 8.72	1 0.01	Included in 2	0 1.90	0 0.90	0 6.39	2 5.92	..	2 5.92
King William's Town—									
Grey Hospital	2 0.84	1 9.68	0 0.17	0 3.59	0 1.65	1 0.49	5 4.42	..	5 4.42
Total average ..	0 9.85	1 0.57	0 0.16	0 1.98	0 0.68	0 5.71	2 6.95	..	2 6.95

^a This distinction is calculated on the basis of the actual amount of the total Annual Ordinary Revenue contributed by the Government.

(a) Includes amount paid for Electrical Repairs.

(b) Average cost per patient for the treatment of 383 patients visited in their own homes, and 12,128 out-patients.

(c) The total average daily cost per patient is calculated in all the above Hospitals with the exception of the Cape Town Free Dispensary, where no accommodation exists for daily patients.

† Fuel only, light included in 2.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-Aided Hospitals and Kindred Institutions.

TABLE 5.

Return of Average Cost per Patient during the Year ended 31st December, 1905.

INSTITUTION.	Average Daily Cost per Patient.							Proportion of Average daily cost of Patients borne by:—	
	Salaries and Wages to Staff.	Provisions and Supplies to Patients and Staff.	Stimulants.	Fuel and Light.	Medicines and Instruments.	Other Items.	Total.	Ordinary Sources of Revenue.	Government.*
A.—State-Aided.	1	2	3	4	5	6			
COLONY PROPER.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Albany— Albany General Hospital	2 1·26	2 8·90	0 1·16	0 3·05	0 8·51	1 4·07	7 2·95	2 0·71	5 2·24
Barkly West— Barkly West Hospital	1 11·88	2 6·39	0 0·23	0 4·65	0 1·47	2 7·25	7 7·87	2 11·21	4 8·66
Cape— Somerset Hospital	2 7·63	2 4·77	0 0·55	0 5·12	0 8·86	1 6·92	7 9·85	3 6·72	4 3·13
Suburban Hospital, Woodstock ..	1 7·92	2 6·12	Included in 2.	1 1·08	0 10·96	1 9·33	7 11·41	6 7·20	1 4·21
Rondebosch and Mowbray Cottage Hospital.	2 2·68	2 9·34	Included in 2.	0 8·88	0 11·63	2 11·66	9 8·19	8 2·45	1 5·74
Victoria Cottage Hospital, Wynberg	1 7·73	1 11·51	Included in 5.	0 4·64	0 7·55	1 1·57	5 9·00	4 1·87	1 7·13
Eaton Convalescent Home, Plumstead.	1 4·04	1 7·00	0 0·08	0 1·78	0 0·87	0 10·76	4 0·53	2 10·22	1 2·31
Cape Town Free Dispensary	0 4·87	..	..	0 0·35	0 5·47	0 7·14	1 5·83	1 0·78	0 5·05
Simon's Town Cottage Hospital ..	2 4·25	3 0·23	Included in 2.	0 6·30	1 11·59	3 4·38	11 2·75	7 6·48	3 8·27
Cradoek— Queen's Central Hospital	1 3·60	2 2·85	Included in 2.	0 8·55	0 5·56	2 8·07	7 4·63	3 1·21	4 3·42
East London— Frere Hospital	2 7·06	2 1·85	0 1·21	0 4·76	0 6·94	2 3·49	8 1·31	3 7·84	4 5·47
Graaff-Reinet— Midland Hospital	1 6·53	2 5·61	Included in 5.	0 1·32	0 10·39	1 9·19	6 9·04	0 8·78	6 0·26
Kimberley— Kimberley Hospital	2 0·81	2 2·02	0 1·60	0 5·66	0 3·63	1 2·53	6 4·25	4 9·44	1 6·81
Mafeking— Victoria Hospital	4 6·49	2 7·09	0 0·95	0 6·49	0 7·97	3 11·12	12 4·11	5 2·33	7 1·78
Oudtshoorn— Royal South-Western Hospital ..	1 8·60	2 9·64	Included in 5.	0 3·52	0 5·00	1 9·12	6 11·88	3 10·65	3 1·23
Port Elizabeth— Provincial Hospital.. ..	1 8·74	1 11·46	0 1·03	0 4·99	0 2·37	1 1·79	5 6·38	2 6·29	3 0·09
Victoria Memorial Home	0 9·88	1 0·79	..	0 2·29	0 0·13	0 5·91	2 7·00	2 2·67	0 4·33
Queenstown— Frontier Hospital	1 11·20	2 6·85	0 0·76	0 5·08	0 4·40	2 3·09	7 7·38	4 0·87	3 6·51
Stellenbosch— Queen Victoria Memorial Hospital..	3 8·01	3 11·58	0 0·38	0 3·62	1 0·81	3 1·76	12 2·16	7 11·57	4 2·59
Uitenhage— Uitenhage Cottage Hospital ..	1 10·42	2 2·70	0 1·73	0 4·70	0 9·26	1 5·81	6 10·62	2 9·45	4 1·17
Victoria East— Victoria Hospital, Lovedale ..	2 3·38	1 3·39	Included in 5.	0 1·79	1 2·45	1 0·04	5 11·05	3 6·82	2 4·23
Vryburg— Vryburg Hospital	6 2·37	11 11·88	Included in 2.	1 8·13	1 3·04	4 1·97	25 3·39	2 1·23	23 2·16
NATIVE TERRITORIES.									
Butterworth— Butterworth Cottage Hospital ..	1 1·22	2 0·22	0 0·64	0 1·81	1 1·24	1 7·29	6 0·42	4 2·50	1 9·92
Mount Currie— East Griqualand and Usher Memorial Hospital, Kokstad.	1 8·38	2 2·24	0 1·28	Included in 2	0 6·20	1 7·95	6 2·05	3 3·45	2 10·60
Umtata— Umtata Cottage Hospital	0 11·12	1 4·73	Included in 2.	0 1·35	0 8·11	0 10·09	3 11·40	1 11·18	2 0·22
Total average	2 0·63	2 2·81	0 0·87	0 5·02	0 6·04	1 5·89	(b) 6 9·31	3 10·07	2 11·24
B.—Government Institutions.									
COLONY PROPER.									
Albany— Chronic Sick Hospital	0 8·00	0 10·23	0 0·47	0 1·50	0 0·33	0 5·64	2 2·17	..	2 2·17
Cape— Old Somerset Hospital	0 7·80	0 9·77	Included in 2.	0 1·92	0 0·86	0 5·38	2 1·73	..	2 1·73
King William's Town— Grey Hospital	2 1·86	1 7·11	0 0·09	0 3·25	0 1·73	0 9·72	4 11·76	..	4 11·76
Total average	0 9·35	0 10·69	0 0·16	0 1·89	0 0·76	0 5·82	2 4·67	..	2 4·67

* This distribution is calculated on the basis of the actual amount of the total Annual Ordinary Revenue contributed by the Government.

(a) Average cost per patient for the treatment of 379 patients visited in their own homes, and 11,114 out-patients.

(b) The total average daily cost per patient is calculated on all the above Hospitals with the exception of the Cape Town Free Dispensary, where no accommodation exists for daily patients.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-Aided Hospitals and Kindred Institutions.

TABLE 6.—1904.

Tariff of Charges for Paying and Contributing Patients (including Charges for Patients from Government Departments or Public Bodies).

NAME OF HOSPITAL.	Average Cost per Patient.	Private Ward.	Semi-Private Ward.	General Ward.	Police Forces and C.M.R.	Railway Employees.	Government Pauper or Venereal.
<i>A.—State Aided.</i>							
COLONY PROPER.							
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Albany—							
Albany General Hospital ..	9 3·14	10 0	7 6	5 0	3 0	3 0	2 6
Barkly West—							
Barkly West Hospital ..	5 2·27	7 6	7 6	7 6	5 0	..	..
Cape—							
Somerset Hospital ..	7 5·79	..	12 0	6 0	6 0	6 0	..
Suburban Hospital, Woodstock	7 5·74	(a)	(a)	(a)	6 0	6 0	..
Rondebosch and Mowbray ..	10 3·63	12 6	..	6d. to 7 6	4 6	4 6	Free
Cottage Hospital							
Victoria Cottage Hospital.	5 1·71	12 6	5 0	3 6	3 6	5 6	..
Wynberg							
Eaton Convalescent Home, Plumstead	3 11·66	3 6 to 6 ½	..	..	4 6	4 6	..
Cape Town Free Dispensary ..	1 3·54	Attendance free;	patients pay for prescriptions if able.				..
Cradock—							
Queen's Central Hospital ..	6 4·32	10 0	..	5 0	3 6	3 6	..
East London—							
Frere Hospital ..	7 7·13	10 0	7 6	5 0	3 0	4 6	..
Graaff-Reinet—							
Midland Hospital ..	8 5·94	7 6	..	5 0	3 0	3 0	..
Kimberley—							
Kimberley Hospital ..	6 8·84	15 0	10 0	5 0	5 0	5 0	{ European, 4/6 Native, 3 -
Mafeking—							
Victoria Hospital ..	12 3·62	10 6	7 6	5 6	4 6	5 0	..
Oudtshoorn—							
Royal South-Western Hospital	10 6·24	10 0	6 0	(b)4 6	..	..	..
Port Elizabeth—							
Provincial Hospital ..	5 8·07	12 6 & 7/6	..	5 6	5 6	4 6	2 0
Victoria Memorial Home ..	5 11·57	Those able to pay, £6 per month.	..	..	..	..	..
Queenstown—							
Frontier Hospital ..	8 7·43	10 6	8 6	5 0	4 0	3 0	{ Venereal, 3/- Chronic Sick 2 -
Uitenhage—							
Uitenhage Cottage Hospital ..	8 8·86	10 0	7 6	5 0	3 0	3 6	Free
Victoria East—							
Victoria Hospital, Lovedale ..	7 4·32	..	..	1/- Native	..	..	Free
Vryburg—							
Vryburg Hospital ..	17 2·98	10 0	5 0	3 - Native	3 0	{ European, 5/- Native, 3 -	..
NATIVE TERRITORIES.							
Butterworth—							
Butterworth Cottage Hospital	7 10·82	7 6	7 6	{ Natives, } { 1/- to 2/6 }	..	5 0	..
Mount Currie—							
East Griqualand and Usher Memorial Hospital, Kokstad	7 8·71	10 6	..	7 6	..	..	..
Umtata—							
Umtata Cottage Hospital ..	4 6·31	..	..	5/- European, Natives 5/- per week, or 1 - per diem.	3 0	..	..
Total Average ..	6 11·93	9 11	7 7	4 6	4 1	4 5	1 6
<i>B.—Government Institutions.</i>							
COLONY PROPER.							
Albany—							
Chronic Sick Hospital ..	1 11·73	..	..	3 - or less	..	..	..
Cape—							
Old Somerset Hospital ..	2 5·92	..	..	3 - or less	..	..	..
King William's Town—							
Grey Hospital ..	5 4·42	7/6 to 10/-	5 0	2 - to 3 -	5 0	3 0	1 0
Total Average ..	2 6·95	8 9	5 0	2 6	5 0	3 0	1 0

(a) According to circumstances of patient. (b) Mechanics and tradesmen charged 3s. ; labourers, 1s. 6d. ; servants (in work), 2s ; servants (out of work), 1s. per diem.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

Government and State-Aided Hospitals and Kindred Institutions.

TABLE 6.—1905.

Tariff of Charges for Paying and Contributing Patients (including Charges for Patients from Government Departments or Public Bodies).

NAME OF HOSPITAL.	Average Cost per Patient.	Private Ward.	Semi-Private Ward.	General Ward.	Police Forces and C.M.R.	Railway Employees.	Government Pauper or Venereal.
<i>A.—State-Aided.</i>							
COLONY PROPER.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Albany—							
Albany General Hospital ..	7 2·95	10 0	7 6	5 0	3 6	3 0	2 6
Barkly West—							
Barkly West Hospital ..	7 7·87	7 6	7 6	7 6	5 0	..	..
Cape—							
Somerset Hospital ..	7 9·85	..	12 0	6 0	6 0	6 0	..
Suburban Hospital, Woodstock	7 11·41	(a)	(a)	(a)	6 0	6 0	..
Rondebosch and Mowbray Cottage Hospital.	9 8·19	12 6	..	6d. to 7/6	4 6	4 6	Free
Victoria Cottage Hospital, Wynberg.	5 9·00	12 6	5 0	(b) 3 6	3 6	5 0	..
Eaton Convalescent Home, Plumstead.	4 0·53	(c)	(c)	(c)	4 6	4 6	Free
Cape Town Free Dispensary ..	1 5·83	..	Attendance free; patients pay for prescriptions if able.				Free
Simon's Town Cottage Hospital	11 2·75	12 6	7 6	7/- or less	5 0	5 0	Free
Cradoek—							
Queen's Central Hospital ..	7 1·63	5/- to 10/-	..	5 0	3 6	3 6	..
East London—							
Frere Hospital..	8 1·31	10 0	7 6	5 0	3 0	4 6	..
Graaff-Reinet—							
Midland Hospital ..	6 9·04	7 6	..	5 0	3 0	3 0	..
Kimberley—							
Kimberley Hospital ..	6 4·25	15 0	10 0	5 0	5 0	5 0	{ European, 4 6 { Coloured, 3 -
Mafeking—							
Victoria Hospital ..	12 4·11	10 6	7 6	5 6	4 6	5 0	..
Oudtshoorn—							
Royal South-Western Hospital	6 11·88	12 6	6 0	(d) 4 6	..	..	..
Port Elizabeth—							
Provincial Hospital ..	5 6·38	12 6	7 6	5 6	5 0	4 6	2 0
Victoria Memorial Home ..	2 7·00	..	Those able to pay, £6 per month.				..
Queenstown—							
Frontier Hospital ..	7 7·38	10 6	8 6	5 0	4 0	3 0	2 0
Stellenbosch—							
Queen Victoria Memorial Hospital.	12 2·16	10 6	..	7 6	..	5 0	..
Uitenhage—							
Uitenhage Cottage Hospital ..	6 10·62	10 0	7 6	5 0	3 0	3 6	Free
Victoria East—							
Victoria Hospital, Lovedale ..	5 11·05	..	..	1/- Natives	..	..	..
Vryburg—							
Vryburg Hospital ..	25 3·39	12 6	7 6	7/6 or less	5 0	European, 5/- Native, 3 -	..
NATIVE TERRITORIES.							
Butterworth—							
Butterworth Cottage Hospital	6 0·42	7 6	7 6	5 - to 7/6	5 0	5 0	..
Mount Currie—							
East Griqualand and Usher Memorial Hospital, Kokstad.	6 2·05	10 6	..	7 6	7 6	..	Free
Umtata—							
Umtata Cottage Hospital ..	3 11·40	..	5 0	5 0	3 0	..	1 6
Total Average ..	6 10·07	10 8	7 7	5 2	4 6	4 5	1 4
<i>B.—Government Institutions.</i>							
COLONY PROPER.							
Albany—							
Chronie Sick Hospital ..	2 2·17	..	..	3 - or less	..	..	..
Cape—							
Old Somerset Hospital ..	2 1·73	..	..	3 - or less	..	..	..
King William's Town—							
Grey Hospital ..	4 11·76	10 - & 7 6	..	5 0	5 0	..	..
Total Average ..	2 4·67	8 9	..	3 8	5 0	..	..

(a) According to circumstances of patient.

(b) Reduced Scale:—Labourers, 1s. per diem; domestic servants (in service) 1s. 6d. per diem, (out of service), 1s. per diem.

(c) According to what patient can afford.

(d) Mechanics and tradesmen charged 3s., labourers 1s. 6d., servants (in work) 2s., and servants (out of work) 1s. per diem

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."
State-Aided Hospitals and Kindred Institutions.

TABLE 7.

Analysis of Extraordinary Revenue and Expenditure during Year ended 31st December, 1904.

INSTITUTION.	Extraordinary Revenue.			Total Ex- traordinary Expenditure.	REMARKS.
	From Government (Special Grants).	From other Sources.	Total.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
COLONY PROPER.					
Albany—					
Albany General Hospital ...	...	95 7 1	95 7 1	...	
Barkly West—					
Barkly West Hospital ...	...	...	...	...
Cape—					
Somerset Hospital ...	2,104 16 9	1,250 5 10	3,355 2 7	2,116 0 9	£2,104 16s. 9d. received from Government, and £2,116 0s. 9d. expended on New Laundry.
Suburban Hospital, Woodstock ...	...	...	...	...
Rondebosch & Mowbray Cottage Hospital ...	75 0 0	1,150 0 0	1,225 0 0	500 0 0	Mortgage Bond, part paid off, £500.
Victoria Cottage Hospital, Wynberg ...	904 2 5	453 15 0	1,357 17 5	349 12 6	£175 expended on Hospital Extension, and £174 12s. 6d. on erection of laundry.
Eaton Convalescent Home, Plumstead... ..	...	2 2 0	2 2 0	...	
Cape Town Free Dispensary ...	...	3,499 7 2	3,499 7 2	7,136 13 8	£7,136 13s. 8d. expended on site for New Dispensary and transfer fees in connection therewith.
Craddock—					
Queen's Central Hospital ...	...	306 7 6	306 7 6	...	Grant by Divisional Council towards Nurses' Home, and Interest.
East London—					
Freere Hospital ...	...	...	...	855 3 5	To Architect, plans for residence for R.M.O., £10 10s. 0d.; to Contractor, part payment for drainage construction. £60; building and furnishing of Additional Nurses' Quarters, £748 12s. 11d.; structural repairs to Servants' Quarters and fencing, £36 0s. 6d.
Graaff-Reinet—					
Midland Hospital ...	...	...	...	335 0 4	£335 0s. 4d. expended on New Operating Theatre.
Kimberley—					
Kimberley Hospital ...	...	194 4 11	194 4 11	5,782 10 4	£194 4s. 11d. received from sale of old buildings, and £5,782 10s. 4d. expended on new buildings.
Mafeking—					
Victoria Hospital ...	125 0 0	...	125 0 0	...	£200 as bequest for endowment.
Oudtshoorn—					
Royal South-Western Hospital ...	...	200 0 0	200 0 0	...	Extraordinary Revenue includes £95, left as legacy; £350, donation towards Building Fund, and £1,000, Endowment. £192 19s. 9d. expended on building improvements, etc.
Port Elizabeth—					
Provincial Hospital ...	...	1,445 0 0	1,445 0 0	192 19 9	£114 spent on drain connection with Port Elizabeth Municipality, and £11 5s. 0d. on fencing for Graveyard.
Victoria Memorial Home ...	...	...	...	125 5 0	
Queenstown—					
Frontier Hospital ...	...	355 0 0	355 0 0	...	
Uitenhage—					
Uitenhage Cottage Hospital ...	...	559 5 10	559 5 10	851 5 0	Extraordinary Revenue includes £259 5s. 10d., and £300 special grants from Town and Divisional Councils, respectively. £434 14s. 8d. was spent on furniture; £260 12s. 8d. on buildings; £132 17s. 11d. on surgical appliances, and £22 19s. 9d. on stationery and account books.
Victoria East—					
Victoria Hospital, Lovedale ...	912 3 7	685 17 11	1,598 1 6	2,169 1 2	£1,598 1s. 6d. received for Building Fund, and £2,169 1s. 2d. spent on the building of the East and West wings of Institution.
Vryburg—					
Vryburg Hospital ...	...	...	...	...
NATIVE TERRITORIES.					
Butterworth—					
Butterworth Cottage Hospital ...	...	...	...	...
Mount Currie—					
East Griqualand and Usher Memorial Hospital, Kokstad.	...	...	...	199 14 8	£186 0s. 2d. spent on Hospital Extension, and £13 14s. 6d. in connection with Patients' Trust Fund.
Umtata—					
Umtata Cottage Hospital...	...	...	...	65 17 6	£65 17s. 6d. spent on alterations and repairs to Building.
Total ...	4,121 2 9	10,196 13 3	14,317 16 0	20,679 4 1	

ANNEXURE "B."
State-Aided Hospitals and Kindred Institutions.

TABLE 7.
Analysis of Extraordinary Revenue and Expenditure during the Year ended 31st December, 1905.

INSTITUTION.	Extraordinary Revenue.			Total.	Total Ex- traordinary Expenditure.	REMARKS.
	From Government (Special Grants).	From other Sources.				
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
ALBANY.—						
Albany General Hospital...	...	202 19 0	202 19 0	232 5 3	£232 5s. 3d. expended on buildings.	
Barkly West—						
Barkly West Hospital ...	...	...	...	...	...
Cape—						
Somerset Hospital ...	500 0 0	744 4 5	1,244 4 5	531 3 5	Expenditure :—Victoria Nurses' Home, Salary of Special Draughtsman, £18 13s. 4d.; City Council, for laying electric cable, £40 6s. 3d.; Internal Maintenance of Buildings, &c., £173 16s. 4d.; Miscellaneous, £298 7s. 6d.	
Suburban Hospital, Woodstock ...	...	...	...	...	...
Rondebosch and Mowbray Cottage Hospital...	125 0 0	...	125 0 0	433 10 3	£433 10s. 3d. expended on drainage.	
Victoria Cottage Hospital, Wynberg ...	2,000 0 0	1,839 4 10	3,839 4 10	4,355 14 10	Expenditure :—Telephone Installment, £75; Balance of Laundry Account, £10 16s. 6d., and Building Fund, £4,269 18s. 4d.	
Eaton Convalescent Home, Plumstead	200 0 0	478 1 0	678 1 0	591 9 11	£591 9s. 11d. expended on repairs to damaged roof and renewal of broken furniture.	
Cape Town Free Dispensary ...	2,000 0 0	6,014 10 0	8,014 10 0	10,812 7 2	£10,812 7s. 2d. expended on New Building, Buitenkant Street.	
Simon's Town Cottage Hospital	123 15 0	100 0 0	223 15 0	356 8 11	£233 19s. expended on Alterations, and £122 9s. 11d. on Equipment.	
Craddock—						
Queen's Central Hospital...	700 0 0	119 11 4	819 11 4	550 2 7	£550 expended on Nurses' Home, and £0 2s. 7d. on Cheque Book and Stamp.	
East London—						
Frere Hospital	...	...	...	71 4 0	£71 4s. 0d. paid to Architect for Plans for Nurses' Quarters and Proposed New Ward.	
Graaff-Reinet—						
Midland Hospital ...	...	...	...	428 19 6	£178 19s. 6d. paid for New Closets, and £250 as Gratuity to Lay Superintendent after 2½ years' service.	
Kimberley—						
Kimberley Hospital	...	...	...	4,986 10 6	£4,650 13s. 6d. spent on New Buildings, and £335 17s. on Installation of Water Pipes.	
Maifeking—						
Victoria Hospital ...	250 0 0	*25 0 0	275 0 0	...	* £25 obtained from Sale of Piano, which had been set aside for Nurses' Home.	
Oudtshoorn—						
Royal South-Western Hospital ...	...	...	...	...
Port Elizabeth—						
Provincial Hospital	...	1,399 0 10	1,399 0 10	333 9 0	£15 6s. 6d. spent on Installation of Electric Bells, and £18 2s. 6d. on Sanitary Improve-ments.	
Victoria Memorial Home ...	...	...	...	74 1 6	£74 1s. 6d., Advance to Building Account.	
Queenstown—						
Frontier Hospital ...	...	...	...	472 4 3	£472 4s. 3d. spent in completing Buildings, providing Furniture and Equipment, and fencing and laying out grounds.	
Stellenbosch—						
Queen Victoria Memorial Hospital	...	...	...	114 15 6	£114 15s. 6d. spent on alterations to buildings,	
Uitenhage—						
Uitenhage Cottage Hospital	...	...	...	263 12 8	£263 12s. 8d. spent on building of West Wing.	
Victoria East—						
Victoria Hospital, Lovedale	87 16 5	128 0 3	215 16 8	204 13 6	£204 13s. 6d. paid for refurnishing the Hospital.	
Vryburg—						
Vryburg Hospital ...	204 13 6	...	204 13 6	...	...
NATIVE TERRITORIES.						
Butterworth—						
Butterworth Cottage Hospital ...	150 0 0	...	150 0 0	98 14 3	Freight Charges, New Hut, and Fee for Estimates, £29 1s. 9d. and Building Fund, £69 12s. 6d.	
Mount Currie—						
East Griqualand and Usher Memorial Hospital, Kokstad	...	...	...	98 5 8	Ladies Special Fund Account, £44 12s. 3d.; other, £53 13s. 5d.	
Umtata—						
Umtata Cottage Hospital...	...	...	...	42 2 4	Paid Overdraft on 31st December, 1904, £5 18s. 8d., and transferred £36 3s. 8d. to New Hospital Fund.	
Total	6,341 4 11	11,050 11 8	17,391 16 7	24,751 15 0		

ANNEXURE "B."
State-aided Hospitals and Kindred Institutions.
TABLE 8.
Financial Position at the end of 1904.

INSTITUTION.	Assets, exclusive of Buildings, Land and other Property used for the purposes of the Institution.										Liabilities.													
	Cash at Bank and in hand.			Investments on Capital Account: Received on account of			Sundry Debtors.				Total.	Overdraft.	Loans.	Sundry Creditors.	Total.									
							Special Purposes.	Buildings and Equip-ment.	General Purposes.	Paying Patients' Fees Out-standing.						Other.								
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.						
COLONY PROPER.																								
Albany—																								
Albany General Hospital	630	4	1	...	...	5,836	16	9	258	1	9	...	6,725	2	7	...	227	1	0			
Barkly West—																								
Barkly West Hospital	329	8	3	...	...	...	...	...	...	...	...	...	329	8	3	...	20	3	7			
Cape—																								
Somerset Hospital	1,404	3	6	386	14	1	7,296	13	7	...	...	11	4	0	15,498	8	8	10,666	9	2		
Suburban Hospital, Woodstock	253	7	11	...	...	997	12	0	368	0	0	...	1,618	19	11	...	...	...	...	...
Rondebosch and Mowbray Cottage Hospital	...	...	...	1,500	0	0	...	...	90	0	0	...	1,590	0	0	...	113	9	2	699	16	1
Victoria Cottage Hospital, Wynberg	8	0	0	452	9	4	188	11	6	216	19	6	...	1,574	19	6	...	...	...	38	15	5
Eaton Convalescent Home, Plumstead	81	13	7	...	...	...	...	...	...	...	...	...	81	13	7	...	125	9	5	2,364	9	1
Cape Town Free Dispensary	...	...	...	...	...	...	...	...	...	...	...	...	600	10	3	...	6	7	6	6	7	6
Cradock—																								
Queen's Central Hospital	5	0	0	6	9	0	...	...	196	18	6	...	807	11	11	...	461	5	5	1,599	4	4
East London—																								
Frere Hospital	85	14	11	...	...	...	...	...	233	1	6	...	318	16	5	...	...	...	...	199	13	2
Graaff-Reinet—																								
Midland Hospital	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	118	17	0	...	...	...
Kimberley—																								
Kimberley Hospital	4,839	0	1	...	...	9,038	19	0	805	0	10	...	14,857	16	5	...	...	...	...	2,470	2	4
Mafeking—																								
Victoria Hospital	...	...	...	...	...	...	...	...	164	6	3	...	164	6	3	...	60	18	8	286	6	9
Ondtshoorn—																								
Royal South-Western Hospital	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Port Elizabeth—																								
Provincial Hospital	398	11	10	702	7	2	4,111	1	5	210	0	9	...	12,268	1	2	...	11,638	8	7	15	4	2	
Victoria Memorial Home	83	14	10	...	...	3,500	0	0	8	10	0	...	3,592	4	10	...	28	18	4	28	18	4
Queenstown—																								
Frontier Hospital	444	4	9	...	...	...	...	...	310	12	9	...	754	17	6	...	...	...	...	331	18	1
Uitenhage—																								
Uitenhage Cottage Hospital	290	0	3	...	...	...	...	...	189	10	0	...	479	10	3	...	...	...	...	25	0	0
Victoria East—																								
Victoria Hospital, Lovedale	492	14	0	...	...	...	...	...	43	13	6	...	536	7	6	...	...	...	...	59	12	9
Vryburg—																								
Vryburg Hospital	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NATIVE TERRITORIES.																								
Butterworth—																								
Butterworth Cottage Hospital	11	11	0	...	...	...	...	...	...	...	...	...	11	11	0	...	...	...	...	...	...	...
Mount Currie—																								
East Griqualand & Usher Memorial Hospital, Kokstad	74	10	1	108	6	0	...	...	178	17	5	...	384	2	6	...	...	...	...	...	...	...
Umtata—																								
Umtata Cottage Hospital	5	18	8	5	18	8

(a) Of this £99 4s. 5d. is on loan to Maintenance Account. (b) Railway Sick Fund Loan, £99 4s. 4d. is balance owing to Building Fund and Private Individuals.

ANNEXURE "B."
State-aided Hospitals and Kindred Institutions.
TABLE 8.
Financial Position at end of 1905.

INSTITUTION.	Assets, exclusive of Buildings, Land and other Property used for the purposes of the Institution.										Liabilities.								
	Cash at Bank and in Hand.	Investments on Capital Account: Received on account of						Sundry Debtors.				Overdraft	Loans.	Sundry Creditors.	Total				
		£	s.	d.	£	s.	d.	£	s.	d.									
											Special Purposes.					Buildings and Equipment	General Purposes.	Paying Patients Fees Outstanding.	Other.
COLONY PROPER.																			
Albany—	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	
Albany General Hospital ...	324	16	11	...	...	...	6,039	15	9	331	7	0	27	0	0	6,722	19	8
Barkly West—																			
Barkly West Hospital ...	477	9	9	...	...	...	...	...	...	25	2	0	...	...	...	502	11	9
Cape—																			
Somerset Hospital ...	893	6	4	353	13	3	7	7,605	19	9	...	...	1,088	17	3	16,481	10	2
Suburban Hospital, Woodstock ...	298	1	2	...	...	...	...	1,692	0	0	368	5	0	...	...	2,358	6	2
Rondebosch and Mowbray Cottage Hospital ...	312	11	10	1,500	0	0	...	...	...	123	0	0	...	...	...	1,935	11	10
Victoria Cottage Hospital, Wynberg ...	13	18	4	...	...	...	...	1,100	0	0	166	0	9	...	...	1,279	19	1
Eaton Convalescent Home, Plumstead ...	65	8	6	...	...	...	...	...	...	8	9	0	...	...	...	73	17	6
Cape Town Free Dispensary ...	21	18	4	...	...	...	...	...	...	...	...	...	...	...	...	21	18	4
Simon's Town Cottage Hospital ...	376	10	1	...	...	...	...	...	...	10	17	3	...	...	...	387	7	4
Cradoek—																			
Queen's Central Hospital ...	...	...	...	6	9	0	808	13	2	139	5	0	46	8	6	1,281	14	3
East London—																			
Frere Hospital ...	...	...	...	...	...	...	...	...	...	161	2	0	4	0	0	165	2	0
Graaff-Reinet—																			
Midland Hospital ...	...	...	...	...	...	...	...	...	...	33	7	6	...	...	...	33	7	6
Kimberley—																			
Kimberley Hospital ...	3,175	1	7	...	...	...	...	12,038	19	0	878	3	9	...	...	16,092	4	4
Mafeking—																			
Victoria Hospital ...	221	19	10	...	...	...	25	0	0	80	7	4	...	...	...	327	7	2
Oudtshoorn—																			
Royal South-Western Hospital	2,200	0	0	69	10	0	316	0	0	2,585	10	0
Port Elizabeth—																			
Provincial Hospital ...	190	17	8	760	8	5,472	6	7	6,835	0	0	168	13	0	8	0	13,435	5	11
Victoria Memorial Home ...	196	17	7	...	...	...	...	4,300	0	0	...	...	...	...	...	4,496	17	7
Queenstown—																			
Frontier Hospital ...	260	10	6	...	...	...	...	...	...	366	16	3	177	10	0	804	16	9
Stellenbosch—																			
Queen Victoria Memorial Hospital ...	134	6	2	...	...	...	...	...	...	28	1	0	...	...	...	162	7	2
Uitenhage—																			
Uitenhage Cottage Hospital ...	394	14	7	...	...	...	...	...	...	271	8	6	...	...	...	666	3	1
Victoria East—																			
Victoria Hospital, Lovedale ...	427	8	0	...	...	...	...	...	...	61	10	0	...	...	...	488	18	0
Vryburg—																			
Vryburg Hospital ...	146	3	4	...	...	...	...	...	...	121	9	5	...	...	...	267	12	9
NATIVE TERRITORIES.																			
Butterworth—																			
Butterworth Cottage Hospital ...	295	0	11	...	...	...	...	...	...	26	12	6	...	...	...	321	13	5
Mount Currie—																			
East Griqualand and Usher Memorial Hospital, Kokstad ...	76	18	2	...	...	...	44	12	3	424	19	2	...	...	...	546	9	7
Umtata—																			
Umtata Cottage Hospital ...	134	18	9	...	...	...	...	...	...	46	12	6	...	...	...	181	11	3

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

A N N E X U R E "C."

TABLE 1.—1904.

Return of Outbreaks and Cases of Small-pox occurring in the Colony Proper during the Year ended 31st December, 1904.

DISTRICT.	Number of Outbreaks.	CASES DISCOVERED.								TOTAL.	DEATHS.								TOTAL.
		Unvaccinated.				Pre-vaccinated.					Unvaccinated.				Pre-vaccinated.				
		Europ.		Col.		Europ.		Col.			Europ.		Col.		Europ.		Col.		
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	
Venterstad (Albert)	1	...	...	...	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...
Lady Grey (Aliwal North)	2	...	...	...	2	...	...	1	2	5	...	...	...	...	...	...	...	...	...
Cape ...	6	1	...	3	...	3	...	1	1	*9	...	...	...	...	...	...	...	...	...
Carnarvon ...	2	...	...	3	6	...	...	...	...	9	...	...	...	...	...	...	...	...	...
Cathcart ...	1	...	...	1	...	...	...	1	2	4	...	...	...	...	...	...	...	...	...
Colesberg ...	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
East London ...	5	2	1	2	1	7	8	...	...	21	...	...	...	...	...	...	...	...	...
Glen Grey ...	7	...	...	16	16	...	...	4	5	41	...	...	1	1	...	...	...	...	2
Gordonia ...	5	5	8	16	11	...	...	...	...	40	...	...	...	...	...	...	...	...	...
Herschel ...	8	...	...	26	30	...	...	1	...	57	...	...	...	...	...	...	...	...	...
King William's Town	1	7	1	...	2	...	...	1	...	11	1	...	...	...	1	1	...	...	3
Keiskama Hoek ...	3	...	...	4	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...
Malmesbury ...	7	2	1	5	2	...	...	...	...	†10	...	...	...	...	...	...	...	...	...
Namaqualand ...	3	...	...	15	10	...	...	5	4	34	...	...	...	...	...	...	...	...	...
Oudtshoorn ...	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Paarl ...	5	...	1	27	21	...	...	2	7	58	...	...	...	...	...	...	...	...	...
Wellington ...	1	1	2	...	...	2	1	...	...	6	...	...	...	...	...	...	...	...	...
Port Nolloth ...	1	...	...	4	...	...	...	6	3	13	...	...	...	...	...	...	...	...	...
Prieska ...	2	...	...	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...
Queenstown ...	2	...	...	...	1	...	1	...	...	2	...	...	...	...	...	...	...	...	...
Robertson ...	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Simon's Town	1	...	...	...	...	...	...	4	...	4	...	...	...	...	...	...	...	...	...
Stellenbosch ...	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Steytlerville ...	2	...	...	...	...	1	...	4	3	8	...	...	...	...	...	...	...	...	...
Stutterheim ...	2	1	1	2	2	...	...	...	...	6	...	...	...	...	...	...	...	...	...
Willowmore ...	1	2	...	...	...	1	2	...	...	5	...	...	...	...	...	...	...	...	...
Woodstock ...	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Durbanville ...	2	...	...	2	2	...	...	1	...	5	...	...	...	...	...	...	...	...	...
Worcester ...	2	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Wynberg ...	1	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
Total	78	21	15	127	109	14	15	34	30	365	1	...	1	1	1	1	...	...	5

* Includes 1 case ex S.S. "Braemar Castle." † Includes cases in sub-district of Hopefield.

Summary.

	Cases.	Deaths.	Mortality%.
Unvaccinated ...	272	3	1·10
Pre-vaccinated ...	93	2	2·15
Total ...	365	5	1·37

"NIL" B. Returns (Small-pox) received from the following districts and sub-districts of the Colony Proper:—

Aberdeen.	Ceres.	Kenhardt.	Peddie.	Swellendam.
Adelaide.	Clanwilliam.	Kimberley	Philipstown.	Barrydale.
Albany.	Cradock.	Warrenton.	Petrusville.	Tarka.
Albert.	Maraisburg.	Middledrift.	Piquetberg.	Taung.
Alexandria.	Maclean Town	(King William's	Porterville.	Tulbagh.
Aliwal North.	(East London).	Town.)	Port Elizabeth.	Uitenhage.
Jamestown.	Fort Beaufort.	Knysna.	New Brighton.	Uniondale.
Barkly East.	Fraserburg.	Komgha.	Prince Albert.	Van Rhynsdorp.
Rhodes.	Williston.	Kuruman.	Whittlesea	Victoria East.
Barkly West.	George.	Ladismith.	(Queenstown).	Victoria West.
Klipdam.	Rietfontein	Laingsburg	Sterkstroom	Vosburg.
Bathurst.	(Gordonia).	Mafeking.	(Queenstown).	Vryburg.
Beaufort West.	Graaff-Reinet.	Middelburg.	Richmond.	Wodehouse.
Bedford.	New Bethesda.	Molteno.	Riversdale.	Indwe.
Bredasdorp.	Hanover.	Montagu.	Somerset East.	Rondebosch
Britstown.	Hay.	Mossel Bay.	Pearston.	(Wynberg).
De Aar.	Herbert.	Murraysburg.	Somerset West	
Caledon.	Hope Town.	Garies	(Stellenbosch).	
Calvinia.	Strydenburg.	(Namaqualand).	Steynsburg.	
Ndabeni Location	Humansdorp.	Calitzdorp	Stockenström.	
(Cape).	Jansenville.	(Oudtshoorn).	Sutherland.	

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."

TABLE 1.—1905.

RETURN of Outbreaks and Cases of Small-pox occurring in the Colony Proper during the Year ended 31st December, 1905.

DISTRICT.	Number of Outbreaks	CASES DISCOVERED.								TOTAL.	DEATHS.								TOTAL.
		Unvaccinated.				Pre-vaccinated.					Unvaccinated.				Pre-vaccinated.				
		Europ.		Col.		Europ.		Col.			Europ.		Col.		Europ.		Col.		
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	
Albany	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Aliwal North	1	...	...	2	2	...	...	...	...	4	...	...	...	...	...	...	...	...	...
Barkly East	3	...	...	2	6	...	...	...	3	11	...	...	...	...	...	...	...	...	...
Barkly West	2	...	...	...	1	...	...	1	...	2	...	...	...	...	...	...	...	...	...
Klipdam	3	...	...	5	11	...	...	...	...	16	...	...	...	...	...	...	1	1	2
Beaufort West	1	...	1	21	11	3	...	...	...	36	...	...	1	...	...	...	...	...	1
De Aar (Britstown)	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Cape	19	12	...	7	5	2	1	3	1	*31	...	...	...	...	...	...	1	...	1
Carnarvon	4	4	3	...	...	1	...	...	...	8	...	...	...	...	...	...	...	...	...
Cathcart	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
East London	1	...	1	...	...	1	1	...	...	3	...	...	...	...	...	...	...	...	...
Fraserburg	1	...	...	1	1	...	...	5	9	16	...	...	...	1	...	...	...	...	1
Graaff-Reinet	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Glen Grey	1	...	...	...	2	...	...	2	4	8	...	...	...	...	...	...	...	...	...
Hay	3	...	...	...	1	...	...	3	3	7	...	...	...	...	...	...	...	...	...
Herbert	5	...	...	3	4	...	...	8	12	27	...	...	...	1	...	...	1	1	3
Herschel	3	...	...	83	75	...	...	1	...	159	...	...	...	8	5	...	...	...	13
Kimberley	2	8	5	52	39	14	6	87	41	252	...	...	...	...	6	...	...	1	7
King William's Town	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Laingsburg	1	...	...	...	...	...	...	1	2	3	...	...	...	...	...	...	...	...	...
Malmesbury	3	...	...	1	1	...	...	1	1	†4	...	...	...	...	...	...	...	...	...
Middelburg	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Molteno	1	2	1	1	1	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Murraysburg	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Namaqualand	2	...	...	...	2	...	...	...	...	2	...	...	...	...	...	...	1	...	1
Paarl	6	3	1	29	15	4	2	...	...	54	...	...	...	...	...	...	...	...	...
Wellington	7	...	...	32	17	...	...	3	1	53	...	...	...	...	...	...	...	...	...
Porterville (Piquet- berg).	1	...	...	3	3	...	...	...	1	7	...	...	...	...	...	...	...	...	...
Prieska	7	15	13	...	2	4	4	...	...	38	...	...	...	...	1	...	...	...	1
Queenstown	1	...	...	1	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Whittlesea	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Sterkstroom... ..	1	...	...	1	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...
Simon's Town	1	2	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Pearston (Somerset East).	2	...	...	1	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Stellenbosch	5	...	...	5	6	...	...	...	...	11	...	...	...	1	...	...	...	...	1
Somerset West	1	...	...	1	...	...	...	8	2	11	...	...	...	...	...	...	...	...	...
Vosburg (Victoria West).	1	4	4	...	1	...	...	...	...	9	...	...	...	...	...	...	...	...	...
Indwe (Wodehouse)... ..	5	...	...	6	8	...	...	...	...	14	...	...	...	1	...	...	...	...	1
Woodstock	3	...	...	1	...	1	1	...	...	3	...	...	...	...	...	...	...	...	...
Durbanville... ..	3	...	...	5	2	...	...	2	4	13	...	...	...	...	...	...	...	...	...
Wynberg	3	...	...	3	1	...	...	1	4	9	...	...	...	...	...	...	...	...	...
	111	50	30	267	221	30	15	131	88	832	...	...	10	14	1	...	4	3	32

* Includes 7 cases ex cablesip "Britannia," and 2 cases ex H.M.S. "Dilwara."

† Includes cases in sub-district of Hopefield.

Summary.

	Cases.	Deaths.	Mortality %
Unvaccinated	568	24	4·23
Pre-vaccinated	264	8	3·03
Total	832	32	3·85

"NIL" B. Returns (Small-pox) received from the following districts and sub-districts of the Colony Proper:—

Aberdeen.	Ceres.	Jansenville.	Oudtshoorn.	Swellendam.
Adelaide.	Clanwilliam.	Kenhardt.	Calitzdorp.	Barrydale.
Albert.	Colesberg.	Warrenton	Peddie.	Tarka.
Venterstad.	Craddock.	(Kimberley).	Philipstown.	Taung.
Alexandria.	Maraisburg.	Keiskama Hoek	Petrusville.	Tulbagh.
Lady Grey	Maclean Town	(King William's	Piquetberg.	Uitenhage.
(Aliwal North).	(East London).	Town).	Port Elizabeth.	Uniondale.
Jamestown	Fort Beaufort.	Middel drift	New Brighton.	Van Rhynsdorp.
(Aliwal North).	Williston	(King William's	Port Nolloth.	Victoria East.
Rhodes	(Fraserburg).	Town).	Prince Albert.	Victoria West.
(Barkly East).	George.	Knysna.	Richmond.	Vryburg.
Bathurst.	Gordonia.	Komgha.	Riversdale.	Willowmore.
Bedford.	Rietfontein.	Kuruman.	Robertson.	Wodehouse.
Bredasdorp.	New Bethesda	Ladismith.	Somerset East.	Worcester.
Britstown.	(Graaff-Reinet).	Mafeking.	Steynsburg.	Rondebosch
Caledon.	Hanover.	Montagu.	Steytlerville.	(Wynberg).
Calvinia.	Hope Town.	Mossel Bay.	Stockenström.	
Ndabeni Location	Strydenburg.	Garies	Stutterheim.	
(Cape).	Humansdorp.	(Namaqualand).	Sutherland.	

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE “C.”

TABLE 2.—1904.

Return of outbreaks and cases of Small-pox occurring in the Native Territories during the year ended 31st December, 1904.

DISTRICT.	Number of Outbreaks.	CASES DISCOVERED.								TOTAL.	DEATHS.								TOTAL.
		Unvaccinated.				Pre-vaccinated.					Unvaccinated.				Pre-vaccinated.				
		Europ.		Col.		Europ.		Col.			Europ.		Col.		Europ.		Col.		
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	
A.—TEMBULAND.																			
Engcobo	...	2	...	...	2	...	...	...	...	2	...	...	...	...	...	...	...	...	...
St. Mark's	...	6	...	...	14	18	...	...	...	32	...	...	2	...	...	...	...	...	2
C.—PONDOLAND.																			
Bizana	...	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Libode	...	1	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
D.—GRIQUALAND EAST																			
Kokstad	...	5	...	...	...	...	...	9	12	21	...	...	...	...	...	...	...	...	...
Matatiele	...	3	...	...	20	31	...	...	3	54	...	...	...	...	...	...	...	...	...
Mount Ayliff	...	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Mount Fletcher	...	1	...	...	1	1	...	...	...	2	...	...	...	...	...	...	...	...	...
Mount Frere	...	1	...	...	1	6	...	...	...	7	...	...	...	1	...	...	...	...	1
Tsolo	...	9	...	...	11	10	...	...	2	23	...	...	...	...	...	...	...	...	...
Umzimkulu	...	23	...	...	28	11	...	...	4	46	...	...	4	...	...	...	...	...	4
Total	...	53	...	...	78	77	...	...	20	190	...	...	6	1	...	...	...	...	7

Summary.

	Cases.	Deaths.	Mortality. %
Unvaccinated	155	7	4·52
Pre-vaccinated	35	...	...
Total	190	7	3·68

“NIL” B. Returns (Small-pox) received from the following Districts :—

A.—TEMBULAND.	B.—TRANSKEI.	C.—PONDOLAND.	D.—GRIQUALAND EAST.
Elliot.	Butterworth.	Flagstaff.	Maclear.
Elliotdale.	Idutywa.	Ngqeleni.	Qumbu.
Mqanduli.	Kentani.	Tabankulu.	
Port St. John's.	Nqamakwe.	Lusikisiki.	
Umtata.	Tsomo.		Walfish Bay.
Xalanga.	Willowvale.		

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."

TABLE 2.—1905.

Return of Outbreaks and Cases of Small-pox occurring in the Native Territories during the Year ended 31st December, 1905.

DISTRICT.	Number of Outbreaks.	CASES DISCOVERED.								TOTAL.	DEATHS.								TOTAL.
		Unvaccinated.				Pre-vaccinated.					Unvaccinated.				Pre-vaccinated.				
		Europ.		Col.		Europ.		Col.			Europ.		Col.		Europ.		Col.		
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	
A.—TEMBULAND.																			
Elliotdale	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...
Engcobo	5	...	...	...	7	7	...	...	...	2	...	...	...	...	...	...	...
St. Mark's	9	...	...	...	10	6	...	...	...	1	1	...	...	...	...	...	1
Xalanga	1	...	...	...	2	3	...	...	...	...	...	...	1	...	...	...	1
B.—TRANSKEI.																			
Tsomo	1	...	...	...	3	1	...	...	...	...	...	4	...	...	...	...	...
C.—PONDOLAND.																			
Lusikisiki	1	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
D.—GRIQUALAND EAST.																			
Kokstad	1	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...
Matatiele	2	...	...	...	12	12	...	...	...	...	...	24	...	...	...	...	...
Mount Ayliff	1	...	...	...	1	1	...	...	...	...	...	2	...	...	...	...	...
Mount Fletcher	1	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...
Mount Frere	2	...	...	...	3	9	...	...	...	...	...	12	...	...	...	...	...
Umzimkulu	4	...	...	...	1	3	...	...	...	5	4	13	...	...	...	...	...
Walfish Bay	1	...	...	...	15	13	...	...	...	...	...	28	...	...	...	...	...
Total	30	...	...	...	55	56	...	...	...	10	5	126	...	...	2	...	2

Summary.

	Cases.	Deaths.	Mortality %
Unvaccinated	111	2	1·80
Pre-vaccinated	15	...	...
Total	126	2	1·59

"NIL" B. Returns (Small-pox) received from the following Districts:—

A.—Tembuland	B.—Transkei	C.—Pondoland.	D.—Griqualand East.
Elliot.	Butterworth.	Bizana.	Maclea.
Mqanduli.	Idutywa.	Flagstaff.	Qumbu.
Port St. John's.	Kentani.	Libode.	Tsolo.
Umtata.	Nqamakwe.	Nggeleni.	
	Willowvale.	Tabankulu.	

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."—TABLE 3.—1904.

RETURN of Public Vaccination, showing for each District of the Colony Proper the Number of Centres Visited and the Number of Vaccinations performed during the Year ended 31st December, 1904.

DISTRICT.	Number of Centres at which Vaccination was performed.	Number of Persons Vaccinated by the District Surgeon.	Number of Persons Vaccinated by Laymen under instructions of the District Surgeon.	Total Number of Persons Vaccinated.	Age.		Believed to be Successful.				Unsuccessful.				Number of Primary Vaccinations.	Number of Re-vaccinations.
					Persons over 10 years of age.	Children under 10 years of age.	Males.		Females.		Males.		Females.			
							E.	C.	E.	C.	E.	C.	E.	C.		
Aberdeen	1	73	..	73	73	..	No record	..	..	..	..	..	..	5	68
Albany	16	626	..	626	240	386	No record	..	..	..	..	..	..	455	171
Albert	1	195	..	195	123	72	..	94	..	101	..	..	..	88	107
Venterstad	1	116	..	116	71	45	No record	..	..	..	..	..	..	43	73
Aliwal North	8	384	..	384	158	226	66	125	62	131	..	..	..	232	152
Lady Grey	4	301	..	301	123	178	No record	..	..	..	..	..	..	59	242
Barkly East	1	2	..	2	..	2	1	..	1	..	..	..	..	2	..
Barkly West	18	2,330	..	2,330	153	2,177	32	1,085	49	1,164	..	..	..	2,230	100
Bathurst	10	450	..	450	80	370	No record	..	..	..	..	..	..	370	80
Beaufort West	2	15	..	15	2	13	3	3	1	8	..	..	..	13	2
Bedford	9	184	10	194	62	132	No record	..	..	..	..	..	..	155	39
Bredasdorp	7	111	..	111	7	104	6	35	6	29	2	19	2	111	..	
Britstown	31	380	..	380	111	269	30	167	30	153	..	..	..	380	..
De Aar	39	254	..	254	110	144	4	121	1	126	1	..	..	117	137
Caledon	15	840	..	840	235	605	313	121	250	156	..	..	..	595	245
Calvinia	1	164	..	164	66	98	..	46	..	83	..	22	..	132	32	
Cape	2	693	..	693	43	650	175	180	146	167	6	2	8	635	58	
Ndabeni Location	1	752	..	752	729	23	No record	..	..	..	..	..	..	23	729
Carnarvon	14	515	..	515	229	286	No record	..	..	..	..	..	..	339	176
Cathcart	14	706	..	706	No record	..	No record	..	..	..	..	..	..	No record	..
Clanwilliam	1	21	..	21	21	..	..	17	..	4	..	..	..	12	9
Colesberg	6	723	..	723	340	383	42	280	39	353	..	5	..	372	351	
Maraisburg (Cradock)	1	12	..	12	12	..	..	11	..	1	..	..	..	..	12
East London	36	385	6,384	6,769†	3,318	3,451	301	3,162	297	3,009	..	..	..	3,297	3,472
Maclean Town	1	28	..	28	2	26	3	17	2	6	..	..	..	26	2
Fort Beaufort	1	56	..	56	34	22	2	22	1	11	5	7	2	35	21	
Fraserburg	1	111	..	111	14	97	37	14	42	18	..	..	..	111	..
George	11	648	..	648	40	608	146	174	127	201	..	..	..	642	6
Glen Grey	6	203	249	452 ^a	69	383	No record	..	..	..	..	..	..	No record	..
Gordonia	11	907	3,072	3,979	1,845	2,134	238	1,893	228	1,620	..	..	..	2,806	1,173
Graaff-Reinet	1	249	..	249	180	69	..	..	..	No record	..	..	..	40	209
New Bethesda	1	21	..	21	12	9	5	..	16	..	..	..	..	10	11
Herbert	11	686	..	686	23	663	..	..	..	No record	..	..	..	16†	9†
Herschel	2	296	..	296	96	200	..	..	..	No record	..	..	..	200	96
Hope Town	1	86	..	86	8	78	5	29	4	47	..	..	1	82	4
Humansdorp	9	199	..	199	11	188	25	87	9	78	..	..	..	199	..
Jansenville	1	10	..	10	4	6	2	2	3	3	..	..	..	9	1
Kenhardt	2	54	..	54	52	2	19	22	..	5	..	8	..	13	41	
Kimberley	4	2,664	..	2,664	1,769	895	69	1,929	43	623	..	..	..	1,958	706
Keiskama Hoek (King William's Town)	7	1,075	..	1,075	454	621	No record	..	..	..	..	..	..	415	660
Middledrift (King William's Town)	18	1,434	..	1,434	240	1,194	..	No record	..	..	..	..	..	1,109	325
Knysna	13	263	..	263	15	248	65	64	56	78	..	..	..	263	..
Kuruman	12	3,376	..	3,376	930	2,446	..	1,678	..	1,698	..	..	..	3,215	161
Ladismith	5	225	..	225	23	202	64	55	52	54	..	..	..	203†	7†
Laingsburg	1	13	..	13	6	7	4	4	1	4	..	..	..	10	3
Mafeking	1	103	..	103	45	58	34	4	45	2	5	..	13	103	..	
Malmesbury	13	513	1	517	190	327	59	132	33	157	11	50	14	421	96	
Hopefield	1	211	..	211	88	123	No record	..	..	..	..	..	..	53	158
Molteno	5	461	..	461	No record	..	No record	..	..	..	..	..	..	No record	..
Montagu	1	4	..	4	4	..	..	4	..	..	..	..	..	..	4
Mossel Bay	19	642	..	642	139	503	119	186	130	207	..	..	..	567	75
Namaqualand	9	1,911	112	2,023	1,216	807	46	1,056	60	861	..	..	..	1,980	43
Oudtshoorn	3	653	..	653	272	381	16	386	18	233	..	..	..	372	281
Paarl	11	906	..	906	271	635	36	381	45	444	..	..	..	683	223
Wellington	5	458	..	458	87	371	No record	..	..	..	..	..	..	392	66
Peddie	18	768	..	768	168	600	No record	..	..	..	..	..	..	427	341
Philipstown	6	112	..	112	No record	..	No record	..	..	..	..	..	..	No record	..
Petrusville	6	319	..	319	No record	..	No record	..	..	..	..	..	..	319	..
Piquetberg	7	503	..	503	52	451	No record	..	..	..	..	..	..	433	70
Porterville	4	189	..	189	68	121	No record	..	..	..	..	..	..	156†	..
Port Elizabeth	2	78	..	78	74	4	7	18	1	1	12	36	..	4	74	
New Brighton	1	50	..	50	44	6	..	36	..	14	..	..	..	36	14
Port Nolloth	1	336	..	336	291	45	No record	..	..	..	..	..	..	109†	154
Prieska	2	27	23	50	18	32	10	19	3	18	..	..	..	31	19
Queenstown	1	3	..	3	..	3	1	..	2	..	..	..	..	3	..
Richmond	12	281	..	281	129	152	19	132	23	107	..	..	..	152	129
Riversdale	3	10	..	10	2	8	5	2	3	..	..	..	..	10	..
Robertson	11	323	..	323	48	275	73	82	77	91	..	..	..	323	..
Simonstown	4	282	..	282	45	237	48	72	59	103	..	..	..	231	51
Stellenbosch	2	87	..	87	52	35	..	28	..	53	..	21	..	24	63	
Somerset West	1	..	45	45	45	..	7	33	..	2	..	3	..	..	45
Steytlerville	2	98	..	98	51	47	4	42	7	45	..	..	..	10	88
Stutterheim	3	488	..	488	149	339	No record	..	..	..	..	..	..	412	76
Sutherland	21	187	..	187	30	157	No record	..	..	..	..	..	..	187	..
Swellendam	6	236	..	236	46	190	No record	..	..	..	..	..	..	229	7
Barrydale	7	126	..	126	57	69	No record	..	..	..	..	..	..	123	3
Tarka	15	124	..	124	6	118	6	43	7	55	1	4	1	124	..	
Tulbagh	5	207	..	207	41	166	20	78	28	61	1	13	4	171	36	
Uniondale	15	1,111	..	1,111	148	963	No record	..	..	..	..	..	..	939	172
Van Rhynsdorp	9	263	..	263	No record	..	No record	..	..	..	..	..	..	No record	..
Victoria East	19	960	..	960	107	853	7	464	11	478	..	..	..	No record	..
Victoria West	1	49	..	49	1	48	4	12	15	18	..	..	..	49	..
Vosburg	1	178	..	178	38	140	75	40	41	20	2	..	..	176	2
Willowmore	15	1,313	..	1,313	792	521	335	345	272	361	..	..	..	655	658
Indwe (Wodehouse)	1	92	..	92	4	88	..	46	..	46	..	..	..	85	7
Woodstock	1	170	..	170	20	150	81	15	33	11	..	..	..	164	6
Durbanville	9	262	..	262	97	165	No record	..	..	..	..	..	..	180	82
Worcester	4	249	..	249	90	159	16	69	22	142	..	..	..	136†	101
Wynberg	1	24	..	24	6	18	5	5	6	6	..	..	..	24	..
Rondebosch	1	13	..	13	..	13	4	1	5	3	..	..	..	13	..
Total	643	38,216	9,899	48,115	17,164	29,090	..	..	..	..	..	..	..	31,533	12,834

* In addition to the above, 200 persons were vaccinated by Private Practitioners.

† In addition to above, 564 persons were vaccinated by Private Practitioners.

‡ Information incomplete.

(a) Number of vaccinations performed during the half-year ended 30th June, 1904. Return showing the number of vaccinations performed during the whole of the year 1904 not received.

"NIL" D. Returns (Vaccination) received from the following Districts of the Colony Proper:—

Adelaide.	Cradock.	Warrenton	Calitzdorp	Steynsburg.
Alexandria.	Williston (Fraserburg).	(Kimberley).	(Oudtshoorn).	Stockenstrom.
Jamestown	Rietfontein (Gordonia).	King William's Town.	Prince Albert.	Taung.
(Aliwal North).	Hanover.	Komgha.	Whittlesea (Queenstown).	Uitenhage.
Rhodes (Barkly East).	Hay.	Middelburg.	Sterkstroom (Queenstown).	Vryburg.
Klipdam (Barkly West).	Strydenburg	Murraysburg.	Somerset East.	Wodehouse.
Ceres.	(Hope Town).	Garies (Namaqualand).	Pearston.	

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."—TABLE 3.—1905.

RETURN of Public Vaccination showing for each District of the Colony Proper, the number of Centres visited and the number of Vaccinations performed during the year ended 31st December, 1905.

DISTRICT.	Number of Centres at which Vaccination was performed.	Number of Persons Vaccinated by the District Surgeon.	Number of Persons Vaccinated by Laymen under instructions of the District Surgeon.	Total number of Persons Vaccinated.	Age.		Believed to be Successful.				Unsuccessful.				Number of Primary Vaccinations.	Number of Re-Vaccinations.
					Persons over 10 years of age.	Children under 10 years of age.	Males.		Females.		Males.		Females.			
							E.	C.	E.	C.	E.	C.	E.	C.		
Aberdeen	5	397	624	1,021	595	426		No record							600	421
Adelaide	8	603	..	603	134	469		No record							398	205
Albany	18	1,020	..	1,020	141	879		No record							913	107
Albert	1	191	..	191	109	82		No record							79*	100*
Alexandria	16	746	..	746	178	568		No record							No record	
Aliwal North	6	291	..	291	61	230	61	68	55	107					256	35
Jamestown	3	290	..	290	60	230		No record							274	16
Barkly East.. .. .	5	106	193	299	133	166	48	132	32	87					127	172
Barkly West	2	405	..	405	No record			No record							No record	
Klipdam	13	1,814	1,239	3,053	1,682*	1,128*	..	11	92*			47*			1,508*	1,302*
Bathurst	1	12	..	12	..	12	..	..	..	No record					12	..
Beaufort West	31	779	..	779	365	414	51	323	56	349					418	361
Bedford	6	282	..	282	33	249		No record							253	29
Bredasdorp	9	317	..	317	28	289	73	74	59	50	17	19	14	11	317	..
Britstown	42	472	..	472	116	356	42	174	47	209					472	..
De Aar	1	18	..	18	18	..	1	15	..	..	1	1	..	..	5	13
Caledon	16	773	..	773	148	625		No record							614	159
Calvinia	2	18	102	120	45*	67*	6	41	3	24	4	14	5	5	81*	13*
Cape	4	1,012	3,081†	4,093	2,075	2,018	985	1,226	616	1,129	16	49	17	55	1,799	2,294
Ndabeni Location	1	2,959	..	2,959	2,517	442		No record							442	2,517
Carnarvon	6	189	130	319	126	193	5	12	2	15	36	8	35	17	245	74
Clanwilliam.. .. .	9	611	..	611	151	460	132	162	119	198					579	32
Colesberg	1	54	30	84†	30	54	14	30	20	20					54	30
Maraisburg (Craddock)	1	23	..	23	18	5	..	19	1	3					9	14
East London	1	13	..	13	9	4	7	1	5	..					6	7
Fort Beaufort	13	486	..	486	108	378	3	8	4	6	1	4	1	6	367	119
Fraserburg	1	124	..	124	35	89	1	65	11	47					124	..
George	10	504	..	504	21	483	147	131	120	106					504	..
Glen Grey .. .. .	..	..	Return not received.	..	..	..	..	..	..	..					..	..
Hanover	1	3	..	3	..	3	2	..	1	..					3	..
Hay... .. .	16	967	1,143	2,110	672	1,438	38	51	315	390	13	11	132	193	1,615	495
Herbert	16	2,558	502	3,060	752	2,308	12	631	4	978	148	482	160	645	2,724	336
Herschel	4	3,824	..	3,824	1,858	1,966	..	1,809	..	1,811*	..	102	..	102	2,825	999
Humansdorp	2	39	..	39	3	36	6	16	8	9					3	36
Kenhardt	2	34	..	34	11	23	3	16	3	4		3	2	3	30	4
Kimberley	9	12,546	..	12,546§	8,250	4,296	661	5,382	672	5,831					6,817	5,729
Warrenton	1	1,674	..	1,674	670	1,004	175	378	189	420	80	162	83	187	581	1,093
King William's Town	9	294	..	294	52	242	22	122	23	120					No record	
Kciskama Hoek	13	1,793	..	1,793	183	1,610		No record							1,307	486
Middeldrift	25	2,212	..	2,212	345	1,867		No record							1,760	452
Knysna	1	90	..	90	12	78	12	22	26	22	1	4	3	..	86	4
Komgha	8	1,954	..	1,954	No record			No record							No record	
Kuruman	1	..	2,294	2,294	1,181	1,113	182	189	640	630	88	53	232	280	1,458	836
Ladismith	1	23	..	23	..	23	3	7	5	8					23	..
Laingsburg	1	412	95	507	262	245		No record							238	269
Mafeking	12	1,644	..	1,644	701	943	46	774	42	782					10*	..
Malmesbury	1	112	..	112	59	53		No record							94*	7
Molteno	1	220	..	220	No record			No record							No record	
Montagu	1	3	..	3	3	..	..	3	..	..					..	3
Mossel Bay	17	297	..	297	89	208	87	53	104	53					273	24
Namaqualand	4	283	..	283	174	109	24	179	28	52					264	19
Oudtshoorn.. .. .	12	709	..	709	91	618	117	297	70	225					607	102
Calitzdorp	10	603	..	603	68	535		No record							601	2
Paarl	2	821	2,914	3,735	1,378	2,357	67*	321	66	367					3,490	245
Wellington	6	838	..	838	457	381	188	170	240	240					680	158
Peddie	19	2,319	..	2,319	335	1,984		No record							1,631	688
Piquetberg	8	542	..	542	121	421		No record							502	40
Porterville	5	351	..	351	186	165		No record							351	..
Port Elizabeth	10	1,213	..	1,213	32	1,181	102	451	112	548					1,181	32
New Brighton.. .. .	1	85	..	85	39	46	..	55	..	30					55	30
Port Nolloth	9	19	58	77	27	50		17*	..	41*		1	..	..	76	1
Prieska	13	291	819	1,110	140*	176*	122	35	112	47					210*	106
Queenstown.. .. .	10	593	229	822	106	716	19	377	19	407					822	..
Whittlesea	9	1,246	..	1,246	No record			No record							1,100	146
Sterkstroom	1	469	..	469	334	135		No record							333	136
Riversdale	14	489	..	489	31	458	134	112	144	99					489	..
Robertson	8	282	..	282	16	266	51	90	47	94					282	..
Simon's Town	5	266	..	266	22	244	45	76	41	104					254	12
Somerset East	1	427	..	427	16	411	25	181	29	192					417	10
Pearston	2	7	11	18	7	11	..	8	..	4		1	..	5	9	9
Somerset West (Stellenbosch)	1	291	..	291	104	187	3	129	5	154					157	134
Steytlerville	1	17	..	17	..	17	3	6	1	4				3	17	..
Stutterheim.. .. .	2	370	..	370	53	317	..	..	No record						324	46
Tarka	14	296	..	296	14	282	15	124	17	110		16	3	11	296	..
Taung	1	11	..	11	5	6	1	..	3	..	4	..	2	1	4	7
Tulbagh	4	273	..	273	40	233	25	113	36	92		4	..	3	239	34
Uitenhage	1	170	..	170	122	48	..	78	..	92					170	..
Uniondale	15	1,098	..	1,098	67	1,031		No record							977	121
Victoria East	23	1,621	..	1,621	376	1,245		No record							No record	
Victoria West	13	875	..	875	403	472	211	168	253	162	23	10	31	17	785	90
Vryburg	3	..	1,576	1,576	247	1,329	20	676	20	745	1	63	..	51	1,497	79
Willowmore.. .. .	23	911	..	911	221	690	270	228	233	180					840	71
Wodehouse	1	155	..	155	90	65	..	90	..	65					97	58
Indwe	3	198	..	198	112	86	..	98	..	100					116	82
Woodstock.. .. .	1	236	..	236	5	231	99	21	97	19						

* Information incomplete.

† In addition to above, 40 persons were vaccinated by Private Practitioners. § In addition to these vaccinations performed by the District Surgeon, 5,623 vaccinations were performed by the Board of Health: the Officers of the De Beers Company vaccinated about 18,000 Native employees in the Compound, and Private Practitioners vaccinated about 3,000, making a total of 39,169 in the Division of Kimberley during the year.

† 2,315 vaccinations performed by Cape Town Municipality, and 766 by Cape Divisional Council.

"NIL" D. Returns (Vaccination) received from the following Districts of the Colony proper:—

Venterstad (Albert).	Maclean Town (E. London).	Strydenburg.	Philipstown.	Stockenstrom.
Lady Grey (Aliwal North).	Williston (Fraserburg).	Jansenville.	Petrusville.	Sutherland.
Rhodes (Barkly East).	Gordonia.	Hopefield (Malmesbury).	Prince Albert.	Swellendam.
Cathcart.	Rietfontein.	Middelburg.	Richmond.	Barrydale.
Ceres.	Graaff-Reinet.	Murraysburg.	Stellenbosch.	Van Rhynsdorp.
Craddock.	Hope Town.	Garies (Namaqualand).	Steynsburg.	Durbanville (Woodstock).

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."
TABLE 4.—1904.

RETURN of Public Vaccination showing for each District of the Native Territories the number of Centres visited and the Number of Vaccinations performed during the Year ended 31st December, 1904.

DISTRICT.	Number of Centres at which Vaccination was performed.	Number of Persons vaccinated by the District Surgeon.	Number of Persons vaccinated by Laymen under instructions of the District Surgeon.	Total Number of Persons vaccinated.	AGE.		BELIEVED TO BE SUCCESSFUL.				UNSUCCESSFUL.				Number of Primary Vaccinations.	Number of Re-Vaccinations.
					Persons over 10 years of Age	Children under 10 years of Age	Males.		Females.		Males.		Females.			
							E.	C.	E.	C.	E.	C.	E.	C.		
A. <i>Trimboland.</i>																
Engcobo	14	2,012	...	2,012	824	1,188	...	887	...	1,125	...	...	1,306	706
St. Mark's	3	740	...	740	338	402	...	90 per cent.	...	...	10 per cent.	...	No Record.	
B. <i>Transkei.</i>																
Kentani	40	10,704	...	10,704	4,584	61,20	...	...	...	No record	...	...	4,242	6,462
C. <i>Pondoland.</i>																
Bizana	2	93	...	93	82	11	2	12	1	No record	...	3	11	82		
Libode	1	15	...	15	11	4	...	...	...	No record	...	...	7	8
Nqeleni	6	4,965	...	4,965	2,045	2,920	...	...	...	No record	...	...	3,325	1,640
Tabankulu	22	4,857	...	4,857	2,516	2,341	...	...	...	No record	...	...	2,306	2,551
D. <i>Griqualand East.</i>																
Kokstad	3	440	25	465	173	292	20	...	8	...	21	...	298	167		
Matatiele	2	132	...	132	45	87	...	80	...	52	...	...	102	30
Mount Ayliff	10	1,948	...	1,948	934	1,014	...	...	...	No record	...	...	765	1,183
Mount Fletcher	1	188	...	188	90	98	...	...	...	No record	...	...	188	...
Mount Frere	1	2,068	...	2,068	896	1,172	...	886	...	1,182	...	...	1,227	841
Qumbu	24	7,511	...	7,511	4,198	3,313	...	...	...	No record	...	...	2,974	4,537
Tsolo	15	646	...	646	319	327	...	166	...	...	24	...	114	532
Umzimkulu	23	3,145	...	3,145	*466	*437	...	...	...	No record	...	...	*455	*448
Total	167	39,464	25	39,489	*17,521	*19,726	...	...	...	...	...	...	*17,319	*19,187

From the following Districts "Nil" Returns have been received :—

- A. *Trimboland.*
Elliot.
Elliotdale.
Mganduli.
Port St. John's.
Umtata.
Xalanga.
- B. *Transkei.*
Butterworth.
Idutywa.
Nqamakwe.
Tsono.
Willowvale.

* Information incomplete.

- C. *Pondoland.*
Flagstaff.
Lusikisiki.

- D. *Griqualand East.*
Maclear.

Walsh Bay.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."

TABLE 4.—1905.

RETURN of Public Vaccination showing for each District of the Native Territories the Number of Centres Visited and the Number of Vaccinations Performed during the Year ended 31st December, 1905.

DISTRICT.	Number of Centres at which Vaccination was performed.	Number of Persons Vaccinated by the District Surgeon.	Number of Persons vaccinated under instructions of the District Surgeon.	Total Number of Persons Vaccinated.	AGE.		BELIEVED TO BE SUCCESSFUL.				UNSUCCESSFUL.				Number of Primary Vaccinations.	Number of Re-Vaccinations.
					Persons over 10 years of age.	Children under 10 years of age.	Males.		Females.		Males.		Females.			
							E.	C.	E.	C.	E.	C.	E.	C.		
A. <i>Tembuland.</i>																
Elliotdale ...	24	22,537	...	22,537	9,786	12,751	...	...	...	No record	...	...	...	6,643	15,894
Engcobo ...	12	3,221	...	3,221	1,119	2,102	...	1,573	...	...	...	...	...	2,443	778
St. Mark's ...	14	3,364	...	3,364	1,525	1,839	...	...	...	No record	...	...	...	2,367	997
Xalanga ...	1	184	...	184	73	111	...	...	...	No record	...	...	...	88	96
B. <i>Transkei.</i>																
Tsomo ...	24	9,034	...	9,034	4,725	4,309	...	...	...	No record	...	...	...	No record.	No record.
Willowvale ...	14	5,977	...	5,977	472	5,505	...	...	...	No record	...	...	...	No record.	No record.
C. <i>Pondoland.</i>																
Bizana ...	1	52	...	52	52	...	...	4	...	...	47	...	1	2	50
D. <i>Griqualand East.</i>																
Mount Ayliff ...	16	4,281	...	4,281	2,123	2,158	...	19	...	...	8	...	...	1,759	2,522
Mount Fletcher ...	1	186	...	186	70	116	...	...	...	No record	...	...	...	186	...
Mount Frere ...	1	677	...	677	227	450	...	200	...	477	...	...	...	402	275
Qumbu ...	3	1,167	...	1,167	512	655	...	about 66 $\frac{2}{3}$ per cent.	...	...	about 33 $\frac{1}{3}$ per cent.	...	...	576	591
Tsolo ...	1	749	...	749	749	...	...	...	...	No record	...	...	...	255	494
Umzimkulu ...	8	1,804	...	1,804	664	1,140	...	909	...	895	...	...	...	1,752	52
Walfish Bay ...	3	178	...	178	94	84	...	67	...	69	...	...	18	138	40
Total ...	123	53,411	...	53,411	22,191	31,220	...	...	...	...	...	...	...	*16,511	*21,789

From the following Districts "NIL" Returns have been received:—

A. *Tembuland.*

Elliot.
Mqanduli.
Port St. John's.
Umtata.

B. *Transkei.*

Butterworth.
Idutywa.
Kentani.
Nqamakwe.

C. *Pondoland.*

Flagstaff.
Libode.
Ngqeleni.
Tabankulu.
Lusikisiki.

D. *Griqualand East.*

Kokstad.
Maclear.
Matatiele.

* Information Incomplete.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."

TABLE 5.—1904.

STATEMENT compiled from Returns rendered by the different Resident Magistrates showing the Expenditure in the Several Districts of the Colony Proper, (a) Directly

DISTRICT.	Combined Total of Expenditure incurred by Government and Local Authority.	(a) DIRECTLY BY GOVERNMENT.															Total.
		Special Allowances or Payments to District Surgeon (exclusive of Vaccination).	Travelling Allowances to District Surgeon (exclusive of Vaccination).	Payments to Private Practitioners.	Travelling Allowances to District Surgeon, while Vaccinating.	Special Allowances (if any) to District Surgeon for Vaccinating.	Payments to Lay-Vaccinators.	Payments to Nurses, Guards, Police, &c.	Cost of Provisions and Supplies.	Cost of Construction, Purchase or Rent of Hospital Buildings, Huts, Tents, &c.	Cost of Bedding, Clothing, Furniture, Utensils and Equipment.	Cost of Medicines.	Transport of Patients, Supplies, &c.	Payments made in respect of Compensation for Infected Private Property destroyed.	Miscellaneous Expenses.		
Albany ..	£ s. d. 106 15 6	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. 56 15 6	£ s. d. 50 0 0	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. 106 15 6	
Venterstad (Albert) ..	71 3 8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aliwal North ..	21 0 0	..	..	..	21 0 0	..	..	..	..	..	..	..	..	..	..	21 0 0
Lady Grey ..	40 4 11	..	..	..	12 15 0	..	..	..	..	..	..	..	..	..	..	12 15 0
Barkly West ..	100 0 0	..	..	..	100 0 0	..	..	..	..	..	..	..	..	..	..	100 0 0
Bathurst ..	28 10 0	..	..	..	28 10 0	..	..	..	..	..	..	..	..	..	..	28 10 0
Bedford ..	25 8 6	..	..	..	25 8 6	..	..	..	..	..	..	..	..	..	..	25 8 6
Bredasdorp ..	22 17 6	..	..	..	22 17 6	..	..	..	..	..	..	..	..	..	..	22 17 6
Britstown ..	26 2 0	..	..	..	26 2 0	..	..	..	..	..	..	..	..	..	..	26 2 0
De Aar ..	23 5 6	..	..	..	23 5 6	..	..	..	..	..	..	..	..	..	..	23 5 6
Caledon ..	61 16 0	..	..	..	61 16 0	..	..	..	..	..	..	..	..	..	..	61 16 0
Calvinia ..	6 8 0	..	..	6 8 0	..	..	..	..	..	..	..	..	..	..	..	6 8 0
Cape ..	2,766 14 4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Carnarvon ..	75 17 10	..	..	..	28 19 0	..	..	..	..	..	..	..	..	..	..	28 19 0
Cathcart ..	93 16 3	..	..	..	30 3 0	..	..	..	..	..	..	..	..	..	..	30 3 0
Colesberg ..	67 5 6	..	..	..	26 5 0	..	..	..	..	..	..	..	..	..	..	26 5 0
East London ..	820 3 6	..	..	..	..	54 0 0	..	..	..	..	..	..	..	..	..	54 0 0
George ..	24 11 0	..	..	..	24 11 0	..	..	..	..	..	..	..	..	..	..	24 11 0
Glen Grey ..	97 19 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gordonia ..	257 13 10	..	24 12 0	..	..	29 13 0	37 13 0	73 10 2	..	9 19 6	..	..	..	..	..	175 7 8
Herbert ..	33 17 3	..	..	..	33 17 3	..	..	..	..	..	..	..	..	..	..	33 17 3
Herschel ..	170 2 0	..	117 17 6	..	..	..	51 12 0	0 12 6	..	..	..	..	..	..	..	170 2 0
Humansdorp ..	51 19 6	..	..	..	51 19 6	..	..	..	..	..	..	..	..	..	..	51 19 6
Kimberley ..	63 0 0	..	..	..	9 0 0	54 0 0	..	..	..	..	..	..	..	..	..	63 0 0
King William's Town ..	9 0 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Keiskama ..	77 16 0	..	..	..	60 18 0	..	..	..	..	..	..	..	..	..	..	60 18 0
Hoek ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middel drift ..	87 7 6	..	..	..	87 7 6	..	..	..	..	..	..	..	..	..	..	87 7 6
Knysna ..	17 14 0	..	..	..	17 14 0	..	..	..	..	..	..	..	..	..	..	17 14 0
Kuruman ..	46 10 0	..	..	..	46 10 0	..	..	..	..	..	..	..	..	..	..	46 10 0
Ladismith ..	31 16 0	..	..	..	..	31 16 0	..	..	..	..	..	..	..	..	..	31 16 0
Malmesbury ..	541 4 7	..	..	..	17 5 0	..	..	..	..	..	..	..	..	..	..	17 5 0
Molteno ..	15 10 6	..	..	..	15 10 6	..	..	..	..	..	..	..	..	..	..	15 10 6
Mossel Bay ..	15 9 0	..	..	..	15 9 0	..	..	..	..	..	..	..	..	..	..	15 9 0
Namaqualand ..	442 19 3	..	..	..	53 17 0	..	5 12 0	..	..	..	..	..	..	..	..	59 9 0
Oudtshoorn ..	21 14 7	..	..	..	13 17 6	..	..	..	..	..	..	..	..	..	..	13 17 6
Paarl ..	494 10 0	..	..	..	70 10 0	..	..	..	..	..	..	..	..	..	..	70 10 0
Wellington ..	49 1 11	..	..	..	6 15 0	..	..	..	..	..	..	..	..	..	..	6 15 0
Peddie ..	59 15 6	..	..	..	59 15 6	..	..	..	..	..	..	..	..	..	..	59 15 6
Philipstown ..	22 10 0	..	..	..	22 10 0	..	..	..	..	..	..	..	..	..	..	22 10 0
Petrusville ..	9 13 6	..	..	..	9 13 6	..	..	..	..	..	..	..	..	..	..	9 13 6
Piquetberg ..	45 12 0	..	..	..	45 12 0	..	..	..	..	..	..	..	..	..	..	45 12 0
Porterville ..	18 15 0	..	..	..	18 15 0	..	..	..	..	..	..	..	..	..	..	18 15 0
Port Nolloth ..	5 19 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queenstown ..	58 6 4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Richmond ..	29 12 6	..	..	..	29 12 6	..	..	..	..	..	..	..	..	..	..	29 12 6
Riversdale ..	3 0 0	..	..	..	3 0 0	..	..	..	..	..	..	..	..	..	..	3 0 0
Robertson ..	28 16 8	..	..	..	14 12 6	..	..	..	..	..	..	..	..	..	..	14 12 6
Simonstown ..	27 3 1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stellenbosch ..	15 10 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Son erset W. ..	2 7 6	..	..	2 7 6	..	..	..	..	..	..	..	..	..	..	..	2 7 6
Steytlerville ..	18 1 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stutterheim ..	163 13 9	..	..	..	2 12 6	..	..	..	..	..	..	..	..	..	..	2 12 6
Sutherland ..	34 17 1	..	..	..	..	34 17 1	..	..	..	..	..	..	..	..	..	34 17 1
Swellen dam ..	31 14 6	..	..	..	31 14 6	..	..	..	..	..	..	..	..	..	..	31 14 6
Tarka ..	22 10 0	..	..	..	22 10 0	..	..	..	..	..	..	..	..	..	..	22 10 0
Tulbagh ..	9 0 0	..	..	..	..	9 0 0	..	..	..	..	..	..	..	..	..	9 0 0
Uniondale ..	43 1 0	..	..	..	43 1 0	..	..	..	..	..	..	..	..	..	..	43 1 0
Van Rhynsdorp ..	29 9 6	..	..	..	29 9 6	..	..	..	..	..	..	..	..	..	..	29 9 6
Victoria East ..	55 16 0	..	..	..	55 16 0	..	..	..	..	..	..	..	..	..	..	55 16 0
Willowmore ..	142 8 6	..	..	..	49 11 6	..	..	..	..	..	..	..	..	..	..	49 11 6
Woodstock ..	55 0 1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Durbanville ..	8 5 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Worcester ..	201 3 10	..	27 7 6	..	18 0 0	..	..	..	..	..	..	..	..	..	..	45 7 6
Wynberg ..	110 6 7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	8,159 13 3	..	169 17 0	8 15 6	1445 4 3	179 13 1	89 5 0	89 5 0	74 2 8	..	9 19 6	..	..	..	..	2066 2 0

* Includes expenditure incurred in Sub-district of Hopefield. † Includes the total Expenditure incurred in connection with the treatment of Interest and Sinking Fund on Loans in connection "NIL" C Returns, 1904, have been received

- Aberdeen

Adelaide

Albany

Albert

Alexandria

Barkly East
- Klipdam (Barkly West)

Beaufort West

Ndabeni Location (Cape)

Ceres

Clanwilliam
- Cradock

Maraisburg

Fort Beaufort

Fraserburg

Williston

Rietfontein (Gordonia)
- Graaff-Reinet

Hanover

Hay

Hope Town

Jansenville

Kenhardt

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."—Continued.

TABLE 5.—1904.—Continued.

incurred during the Year ended 31st December, 1904, under the Health Act, 1883, in dealing with Small-pox by Government, and (b) Directly by Local Authority.

DISTRICT.	(b) DIRECTLY BY LOCAL AUTHORITY.															Total.
	Special Allowances or Payments to District Surgeon (exclusive of Vaccination).	Travelling Allowances to District Surgeon (exclusive of Vaccination).	Payments to Private Practitioners.	Travelling Allowances to District Surgeon, while Vaccinating.	Special Allowances (if any) to District Surgeons for Vaccinating.	Payments to Lay-Vaccinators.	Payments to Nurses, Guards, Police, &c.	Cost of Provisions and Supplies.	Cost of Construction, Purchase or Rent of Hospital Buildings, Huts, Tents, &c.	Cost of Bedding, Clothing, Furniture, Utensils and Equipment.	Cost of Medicines.	Transport of Patients, Supplies, &c.	Payments made in respect of Compensation for Infected Private Property destroyed.	Miscellaneous Expenses.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Albany ..																
Venterstad ..	39 15 0	..	..	..	..	..	17 8 0	11 18 5	..	1 16 0	..	..	..	0 6 3	71 3 8
(Albert)																
Aliwal North																
Lady Grey ..	..	..	4 5 0	..	..	..	8 10 6	7 3 3	5 4 2	2 0 0	..	..	..	0 7 0	27 9 11
Barkly West..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bathurst ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bedford ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bredasdorp ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Britstown ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
De Aar ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Caledon ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Calvinia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape ..	47 6 11	..	238 5 0	..	..	..	327 5 9	159 8 10	753 14 5	330 12 7	30 18 11	119 17 3	2 17 0	1756 7 8	2766 14 4
Carnarvon ..	26 17 6	..	..	..	..	..	4 9 0	15 12 4	..	..	..	..	..	..	46 18 10
Cathcart ..	20 12 6	..	..	..	..	..	18 10 6	13 8 3	10 0 0	..	1 2 0	..	..	..	63 13 3
Colesberg ..	6 15 0	..	..	..	..	..	9 7 6	7 8 6	8 5 6	7 14 0	..	1 10 0	..	..	41 0 6
East London..	..	2 0 0	333 0 0	..	..	..	235 9 6	132 13 1	..	9 19 8	16 8 9	36 12 6	..	..	766 3 6
George ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glen Grey ..	..	..	..	25 4 0	..	..	63 13 0	9 2 0	..	..	..	..	..	..	97 19 0
Gordonia ..	..	..	..	..	..	..	26 9 0	53 1 11	..	2 11 6	0 3 9	..	..	..	82 6 2
Herbert ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herschel ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Humansdorp ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kimberley ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
King William's Town	..	6 0 0	..	..	..	..	..	..	..	..	..	..	..	3 0 0	9 0 0
Keiskama ..	..	13 17 6	..	..	..	..	2 7 0	0 13 6	..	..	..	..	..	..	16 18 0
Hoek ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middelbdrift ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Knysna ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kuruman ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ladismith ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malmesbury..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Molteno ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mossel Bay ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Namaqualand	..	153 3 0	13 13 6	..	..	..	55 9 0	127 18 3	..	3 0 0	..	11 2 0	..	19 4 6	383 10 3
Oudtshoorn ..	4 10 0	..	..	..	..	..	..	3 7 1	..	..	..	..	..	..	7 17 1
Paarl ..	90 0 0	50 0 0	14 0 0	..	..	..	145 0 0	78 0 0	29 0 0	10 0 0	..	8 0 0	..	..	424 0 0
Wellington..	18 15 0	..	..	..	..	..	12 16 6	10 15 5	..	..	..	..	..	..	42 6 11
Peddie ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Philipstown ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Petrusville..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Piquetberg ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Porterville..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Port Nolloth ..	..	..	..	..	..	..	5 19 0	..	..	..	..	..	..	..	5 19 0
Queenstown ..	..	..	..	..	..	..	26 2 0	22 13 9	4 16 10	2 11 0	1 2 6	..	..	1 0 3	58 6 4
Richmond ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Riversdale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Robertson ..	2 5 0	4 10 0	0 7 6	..	..	0 12 0	1 9 8	5 0 0	..	..	..	..	..	..	14 4 2
Simonstown ..	..	..	..	..	..	..	..	..	27 3 1	..	..	..	..	..	27 3 1
Stellenbosch ..	6 0 0	..	..	..	..	..	2 11 0	5 12 6	1 2 6	..	0 4 0	..	..	..	15 10 0
Somerset W ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Steytlerville..	6 17 6	..	..	..	..	..	10 5 0	0 17 8	..	..	..	..	..	0 1 3	18 1 5
Stutterheim ..	24 15 0	44 12 6	..	..	..	..	68 12 0	16 15 9	1 11 0	..	..	4 15 0	..	..	161 1 3
Sutherland ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Swellendam ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tarka ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tulbagh ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uniondale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Van Rhynsdorp ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria East ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willowmore ..	40 7 6	..	..	..	..	..	7 2 6	18 4 7	..	5 14 0	0 11 6	0 12 6	16 10 2	3 14 3	92 17 0
Woodstock ..	..	..	0 2 6	..	..	..	..	..	54 17 7	..	..	..	..	..	55 0 1
Durbanville ..	..	8 5 0	..	..	..	..	..	..	..	..	..	..	..	..	8 5 0
Worcester ..	..	141 3 10	..	..	..	..	14 12 6	..	..	..	..	..	..	..	155 16 4
Wynberg ..	..	..	..	..	..	..	..	..	110 6 7	..	..	..	..	..	110 6 7
Total ..	334 16 11	423 11 10	603 13 6	25 4 0	..	0 12 0	1063 8 11	699 15 1	1006 1 8	375 18 9	50 11 5	182 9 3	19 7 2	784 1 2	6093 11 3	

All cases of Small-pox admitted to the Rentzkiés Farm Small-pox Hospital, as also the upkeep thereof, with Rentzkiés Farm Small-pox Hospital.

‡ Of this amount £678 represents the

from the following Districts in the Colony Proper :—

Komgha
Laingsburg
Mafeking
Middelburg
Montagu
Murraysburg

Calitzdorp (Oudtshoorn)
Port Elizabeth
New Brighton
Prieska
Prince Albert
Sterkstroom (Queenstown)

Somerset East
Pearston
Steynsburg
Stockenstrom
Taung
Uitenhage

Victoria West
Vryburg
Wodehouse
Indwe

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."

TABLE 5.—1905.

STATEMENT compiled from Returns rendered by the different Resident Magistrates showing the Expenditure incurred in the districts of the Colony proper, (a) Directly by Government

DISTRICT.	Combined Total of Expenditure incurred by Government and Local Authority.	(a) DIRECTLY BY GOVERNMENT.														Total.
		Special Allowances or Payments to District Surgeon (exclusive of Vaccination).	Travelling Allowances to District Surgeon (exclusive of Vaccination).	Payments to Private Practitioners.	Travelling Allowances to District Surgeon while Vaccinating.	Special Allowances (if any) to District Surgeon for Vaccinating.	Payments to Lay Vaccinators.	Payments to Nurses, Guards, Police, etc.	Cost of Provisions and Supplies.	Cost of Construction, Purchase or Rent of Hospital Buildings, Huts, Tents, etc.	Cost of Bedding, Clothing, Furniture, Utensils and Equipment.	Cost of Medicines.	Transport of Patients, Supplies, etc.	Payments made in respect of Compensation for Infected Private Property Destroyed.	Miscellaneous Expenses.	
Aberdeen ..	£ s. d. 14 0 0	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Adelaide ..	11 19 3	..	..	..	11 19 3	..	14 0 0	..	..	..	..	..	..	..	..	14 0 0
Albany ..	135 18 0	..	..	..	60 18 0	50 0 0	..	..	..	..	..	..	..	..	..	110 18 0
Alexandria ..	36 7 6	..	..	..	36 7 6	..	..	..	..	..	..	..	..	..	..	36 7 6
Aliwal North ..	110 1 11	..	..	..	16 5 6	..	..	..	..	..	..	..	..	..	..	16 5 6
Barkly East ..	4 13 3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barkly West ..	45 9 9	..	..	..	15 3 6	..	..	..	..	..	..	..	..	..	..	15 3 6
Klipdam ..	277 14 1	..	..	..	60 18 9	..	14 18 0	..	..	..	..	..	..	..	..	75 16 9
Beaufort West ..	388 6 5	..	..	..	14 18 6	..	..	..	..	..	..	..	..	..	..	14 18 6
Bedford ..	19 5 6	..	..	..	19 5 6	..	..	..	..	..	..	..	..	..	..	19 5 6
Bredasdorp ..	36 17 3	..	..	..	36 17 3	..	..	..	..	..	..	..	..	..	..	36 17 3
Britstown ..	36 17 6	..	..	..	36 17 6	..	..	..	..	..	..	..	..	..	..	36 17 6
De Aar ..	13 16 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Caledon ..	62 11 0	..	..	..	62 11 0	..	..	..	..	..	..	..	..	..	..	62 11 0
Calvinia ..	1 5 6	..	..	..	..	..	1 5 6	..	..	..	..	..	..	..	..	1 5 6
Cape ..	2,067 14 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Carnarvon ..	14 7 6	..	..	..	..	..	1 4 9	..	..	..	..	..	..	..	..	1 4 9
Cathcart ..	5 5 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clanwilliam ..	45 3 0	..	..	..	45 3 0	..	..	..	..	..	..	..	..	..	..	45 3 0
Fort Beaufort ..	26 15 6	..	..	..	..	26 15 6	..	..	..	..	..	..	..	..	..	26 15 6
Fraserburg ..	169 5 10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
George ..	30 3 0	..	..	..	30 3 0	..	..	..	..	..	..	..	..	..	..	30 3 0
Glen Grey ..	102 10 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Graaff-Reinet ..	25 0 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hay ..	195 16 3	..	..	10 18 3	78 4 6	..	10 19 6	..	..	..	..	..	..	..	..	100 2 3
Herbert ..	269 0 1	..	..	..	42 0 0	..	..	..	..	..	..	..	..	..	..	42 0 0
Herschel ..	160 3 0	..	135 12 0	..	9 1 6	..	..	15 9 6	..	..	..	..	..	..	..	160 3 0
Kimberley ..	1,660 9 2	..	..	..	9 15 0	443 18 9	..	..	..	..	..	..	..	..	..	453 13 9
King William's Town ..	31 18 6	..	..	..	21 0 0	..	..	..	..	..	..	..	..	..	..	21 0 0
Keiskama ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hoek ..	51 10 6	..	..	..	51 10 6	..	..	..	..	..	..	..	..	..	..	51 10 6
Middelbult ..	84 4 6	..	..	..	84 4 6	..	..	..	..	..	..	..	..	..	..	84 4 6
Komgha ..	22 7 0	..	..	..	22 7 0	..	..	..	..	..	..	..	..	..	..	22 7 0
Kuruman ..	29 8 0	..	..	..	0 15 0	..	28 13 0	..	..	..	..	..	..	..	..	29 8 0
Laingsburg ..	25 3 11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mafeking ..	23 8 0	..	..	..	23 8 0	..	..	..	..	..	..	..	..	..	..	23 8 0
Malmesbury ..	74 15 7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middelburg ..	19 3 9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Molteno ..	189 8 8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mossel Bay ..	33 10 6	..	..	..	33 10 6	..	..	..	..	..	..	..	..	..	..	33 10 6
Murraysburg ..	16 12 3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Namaqualand ..	16 10 9	..	..	..	1 10 0	..	..	..	..	..	..	..	..	..	..	1 10 0
Oudtshoorn ..	33 0 0	..	..	..	33 0 0	..	..	..	..	..	..	..	..	..	..	33 0 0
Calitzdorp ..	18 7 1½	..	..	..	18 7 1½	..	..	..	..	..	..	..	..	..	..	18 7 1½
Paarl ..	739 18 10	..	..	..	..	43 14 6	40 2 6	..	..	..	..	..	..	..	..	83 17 0
Wellington ..	167 18 0	..	..	..	7 2 6	..	..	..	..	..	..	..	..	..	..	7 2 6
Peddie ..	47 11 0	..	..	..	47 11 0	..	..	..	..	..	..	..	..	..	..	47 11 0
Piquetberg ..	30 9 0	..	..	..	30 9 0	..	..	..	..	..	..	..	..	..	..	30 9 0
Porterville ..	90 13 9	..	..	..	9 15 0	..	..	..	..	..	..	..	..	..	..	9 15 0
Port Nolloth ..	13 0 0	..	..	..	9 0 0	..	4 0 0	..	..	..	..	..	..	..	..	13 0 0
Prieska ..	68 17 6	..	..	..	9 17 6	..	..	..	..	..	..	..	..	..	..	9 17 6
Queenstown ..	67 5 0	..	..	..	47 6 6	..	..	..	..	..	..	..	..	..	..	47 6 6
Sterkstroom ..	32 3 2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Riversdale ..	19 11 6	..	..	..	19 11 6	..	..	..	..	..	..	..	..	..	..	19 11 6
Robertson ..	16 1 0	..	..	..	16 1 0	..	..	..	..	..	..	..	..	..	..	16 1 0
Simonstown ..	31 4 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pearston ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(Somerset E.) ..	11 1 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stellenbosch ..	208 5 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Somerset W. ..	9 17 10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stutterheim ..	6 18 0	..	..	..	6 18 0	..	..	..	..	..	..	..	..	..	..	6 18 0
Tarka ..	17 5 0	..	..	..	17 5 0	..	..	..	..	..	..	..	..	..	..	17 5 0
Uniondale ..	44 3 6	..	..	..	44 3 6	..	..	..	..	..	..	..	..	..	..	44 3 6
Victoria East ..	60 1 6	..	..	..	60 1 6	..	..	..	..	..	..	..	..	..	..	60 1 6
Victoria West ..	117 10 2	..	..	..	64 15 0	..	..	..	..	..	..	..	..	..	..	64 15 0
Vryburg ..	9 14 9	..	..	..	..	..	9 14 9	..	..	..	..	..	..	..	..	9 14 9
Willowmore ..	38 2 0	..	..	..	38 2 0	..	..	..	..	..	..	..	..	..	..	38 2 0
Indwe (Wodehouse) ..	28 12 11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Woodstock ..	66 7 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Durbanville ..	7 2 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Worcester ..	6 0 0	..	..	..	4 17 6	..	..	..	..	..	..	..	..	..	..	4 17 6
Wynberg ..	122 7 0	..	..	..	..	6 14 6	..	..	..	..	..	..	..	..	..	6 14 6
Total ..	8,714 3 0½	..	135 12 0	10 18 3	1,308 18 4½	571 3 3	124 18 0	15 9 6	..	..	..	..	..	..	..	2,166 19 4½

Albert.
Venterstad.
Lady Grey (Aliwal North).
Bathurst.
Ndabeni Location (Cape).

Ceres.
Colesberg.
Cradock.
Maraisburg.
East London.

Williston (Fraserburg).
Gordonia.
Rietfontein.
Hanover.
Hope Town.

"NIL" C. Returns have been received
Jansenville.
Kenhardt.
Knysna.
Ladismith.
Montagu.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."—Continued.

TABLE 5.—1905.—Continued.

during the year ended 31st December, 1905, under the Health Act, 1883, in dealing with Small-pox in the several and (b) directly by Local Authority.

DISTRICT.	(b) DIRECTLY BY LOCAL AUTHORITY.															Total.
	Special Allowances or Payments to District Surgeon (exclusive of Vaccination).	Travelling Allowances to District Surgeon (exclusive of Vaccination).	Payments to Private Practitioners.	Travelling Allowances to District Surgeon while Vaccinating.	Special Allowances (if any) to District Surgeon for Vaccinating.	Payments to Lay Vaccinators.	Payments to Nurses, Guards, Police, etc.	Cost of Provisions and Supplies.	Cost of Construction, Purchase or Rent of Hospital Buildings, Huts, Tents, etc.	Cost of Bedding, Clothing, Furniture, Utensils and Equipment.	Cost of Medicines.	Transport of Patients, Supplies, etc.	Payments made in respect of Compensation for Infected Private Property Destroyed.	Miscellaneous Expenses.		
Aberdeen ..	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Adelaide ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Albany ..	..	..	..	24 15 0	..	..	..	..	..	..	..	..	..	..	24 15 0
Alexandria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Allwal North ..	..	..	13 15 5	..	..	..	27 5 6	47 2 6	..	3 0 0	..	..	2 13 0	..	93 16 5
Barkly East ..	2 5 0	..	..	..	..	2 8 3	..	..	..	..	..	..	..	..	4 13 3
Barkly West ..	..	13 11 9	..	..	..	..	8 0 0	3 4 6	5 10 0	..	..	..	..	..	30 6 3
Klipdam ..	..	89 0 0	..	..	..	..	38 14 3	38 10 10	21 17 3	5 2 0	..	8 13 0	..	..	201 17 4
Beaufort West ..	228 14 0	..	..	..	..	..	61 1 1	68 9 7	..	..	..	..	..	15 3 3	373 7 11
Bedford ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bredasdorp ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Britstown ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
De Aar ..	7 10 0	..	..	..	..	..	..	5 5 0	..	..	..	..	..	1 1 0	13 16 0
Caledon ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Calvinia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape ..	19 2 6	..	225 12 6	..	..	..	483 15 3	270 2 2	62 12 5	31 6 7	13 0 4	161 4 9	1 6 0	*799 12 0	+2,067 14 6
Carnarvon ..	..	13 2 9	..	..	..	..	..	..	..	..	..	..	..	..	13 2 9
Cathcart ..	5 5 0	..	..	..	..	..	..	..	..	..	..	..	..	..	5 5 0
Clanwilliam ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fort Beaufort ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fraserburg ..	..	..	55 13 0	..	..	..	..	82 14 4	8 12 6	..	9 6 0	..	..	13 0 0	169 5 10
George ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glen Grey ..	..	..	..	96 16 6	..	..	1 4 0	4 10 0	..	..	..	..	..	..	102 10 6
Graaff-Reinet ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25 0 0
Hay ..	..	56 6 6	..	..	..	..	39 7 6	..	..	..	..	..	..	..	95 14 0
Herbert ..	45 7 6	21 7 6	..	4 2 6	23 9 6	75 13 6	54 9 0	..	..	..	..	..	..	2 10 7	227 0 1
Herschel ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kimberley ..	..	..	36 19 6	..	..	..	397 7 10	494 18 11	14 0 0	65 13 7	87 2 7	23 5 0	5 0 0	82 8 0	1,206 15 5
King William's Town ..	..	4 5 0	..	..	..	..	..	..	..	..	..	..	..	6 13 6	10 18 6
Keiskama Hoek ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middelburg ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Komgha ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kuruman ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Laingsburg ..	3 3 0	..	..	..	..	..	3 0 0	14 16 11	3 7 0	..	..	0 17 0	..	..	25 3 11
Mafeking ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malmesbury ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middelburg ..	11 5 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Molteno ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mossel Bay ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Murraysburg ..	12 15 0	..	..	..	..	..	1 13 6	2 3 9	..	..	..	..	..	..	16 12 3
Namaqualand ..	..	4 2 6	..	..	..	..	6 6 0	3 9 6	..	..	..	0 15 0	..	0 7 9	15 0 9
Oudtshoorn ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Calitzdorp ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paarl ..	75 0 0	42 0 0	26 10 0	30 10 0	..	..	226 10 0	119 0 0	30 0 0	26 0 0	..	66 10 0	..	14 1 10	656 1 10
Wellington ..	48 0 0	..	..	..	..	..	63 2 6	38 8 7	3 12 7	..	7 11 10	..	..	..	160 15 6
Peddie ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Piquetberg ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Porterville ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Port Nolloth ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Prieska ..	..	50 2 0	..	..	..	..	8 18 0	..	..	..	..	..	..	..	..
Queenstown ..	..	2 5 0	6 19 0	..	..	..	..	..	..	..	..	..	..	..	..
Sterkstroom ..	..	15 11 6	4 11 0	..	1 4 0	5 14 6	3 3 0	7 8 6	..	..	..	..	..	0 5 2	32 3 2
Riversdale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Robertson ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Simonstown ..	..	..	..	..	..	..	1 0 0	..	27 14 6	..	2 10 0	..	..	..	31 4 6
Pearston ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(Somerset E.) ..	9 15 0	..	..	..	..	..	..	1 6 5	..	..	..	..	..	..	11 1 5
Stellenbosch ..	33 15 0	54 0 0	14 12 6	..	..	..	42 9 0	50 9 11	0 7 6	..	..	6 17 0	2 0 0	3 14 6	208 5 5
Somerset W. ..	..	..	..	..	..	..	9 17 10	..	..	..	..	..	..	..	9 17 10
Stutterheim ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tarka ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uniondale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria East ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Victoria West ..	..	..	30 19 6	..	..	..	7 5 0	9 11 5	0 7 3	..	..	..	1 5 0	3 7 0	52 15 2
Vryburg ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willowmore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Indwe (Wodehouse) ..	7 10 0	6 0 0	..	..	1 10 0	..	12 1 6	0 16 5	..	..	0 15 0	..	..	..	28 12 11
Woodstock ..	..	..	0 7 6	..	..	..	..	..	55 9 0	..	..	4 10 0	2 1 0	4 0 0	66 7 6
Durbanville ..	..	7 2 6	..	..	..	..	..	..	..	..	..	..	..	..	7 2 6
Worcester ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1 2 6	1 2 6
Wynberg ..	..	..	..	..	..	..	1 4 0	3 10 6	110 18 0	..	..	..	..	..	115 12 6
	509 7 0	378 17 0	415 19 11	156 4 0	26 3 6	83 16 3	1,497 14 9	1,273 18 6	344 8 0	131 2 2	120 5 9	272 11 9	14 5 0	952 7 1	6,547 3 8	

† Includes the total expenditure incurred in connection with the treatment of all cases of small-pox admitted to the Rentzkie's Farm Small-pox Hospital, also the upkeep thereof. * Of this amount, £678 represents the interest and Sinking Fund on Loans in connection with Rentzkie's Farm Small-pox Hospital.

‡ Includes expenditure incurred in sub-district of Hopefield.

from the following districts of the Colony Proper:—

Philipstown.
Petrusville.
Port Elizabeth.
New Brighton.
Prince Albert.

Richmond.
Somerset East.
Steynsburg.
Steytlerville.
Stockenstrom.

Sutherland.
Swellendam.
Taung.
Tulbagh.
Uitenhage.

Van Rhynsdorp.
Wodehouse.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY. ANNEXURE "C."

TABLE 6.—1904.

STATEMENT compiled from Returns rendered by the different Resident Magistrates showing the expenditure incurred during the year ended 31st December, 1904, under the Health Act, 1883, in dealing with Small-pox in the several districts of the Native Territories, (a) directly by Government, and (b) directly by Local Authority.

(a) DIRECTLY BY GOVERNMENT.																
DISTRICT.	Combined Total of Expendi- ture in- curred by Govern- ment and Local Authority.	Special Allowances or Pay- ments to District Surgeon (exclusive of vaccina- tion).	Travelling Allowances to District Surgeon (exclusive of vaccina- tion).	Payments to Private Practi- tioners.	Travelling Allowances to District Surgeon while vac- cinating.	Special Allowances (if any) to District Surgeon while vac- cinating.	Payments to Lay Vaccina- tors.	Payments to Nurses, Guards, etc.	Cost of Provisions and Supplies.	Cost of Construc- tion, Pur- chase, or Rent of Hospital Buildings, Huts, etc.	Cost of Bedding, Clothing, Furniture, Utensils and Equip- ment.	Cost of Medicines.	Transport of Patients, Supplies, etc.	Payments made in respect of Compensa- tion for Infected Private Property Destroyed.	Miscel- laneous Expenses.	Total.
A.—TEMBULAND.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Engcobo ..	55 4 6	..	7 13 0	..	47 11 6	..	..	..	..	..	..	..	..	..	..	55 4 6
St. Mark's ..	50 3 6	..	38 15 6	..	11 8 0	..	..	..	..	..	..	..	..	..	..	50 3 6
B.—TRANSKEI.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kentani ..	132 6 6	..	..	..	132 6 6	..	..	..	..	..	..	..	..	..	..	132 6 6
C.—PONDOLAND	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bizana ..	4 18 5	..	..	..	3 7 6	..	..	3 0 0	1 18 5	..	..	..	..	..	..	4 18 5
Libode ..	4 8 3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4 8 3
Ngqeleni ..	36 18 0	..	..	..	36 18 0	..	..	..	..	..	..	..	..	..	..	36 18 0
Tabankulu ..	80 0 0	..	..	..	80 0 0	..	..	..	..	..	..	..	..	..	..	80 0 0
D.—GRIQUALAND EAST.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kokstad ..	175 6 2	115 14 6	..	..	25 7 0	..	0 13 6	..	..	..	..	..	..	..	..	141 15 0
Matatielo ..	24 16 6	..	9 3 0	..	15 13 6	..	..	..	..	..	..	..	..	..	..	24 16 6
Mount Ayliff ..	9 10 6	..	..	..	9 10 6	..	..	..	..	..	..	..	..	..	..	9 10 6
Mount Fletcher ..	10 17 2	..	10 17 2	..	..	..	..	..	..	..	..	..	..	..	..	10 17 2
Mount Frere ..	106 7 0	..	..	..	106 7 0	..	..	..	..	..	..	..	..	..	..	106 7 0
Qumbu ..	7 17 6	..	..	..	7 17 6	..	..	..	..	..	..	..	..	..	..	7 17 6
Tsolo ..	91 18 4	..	..	..	91 18 4	..	..	..	..	..	..	..	..	..	..	91 18 4
Umzimkulu ..	164 3 0	..	18 6 0	..	142 14 6	..	3 2 6	..	..	..	..	..	..	..	..	164 3 0
Total ..	954 15 4	115 14 6	84 14 8	..	710 19 10	..	3 16 0	3 0 0	1 18 5	..	..	..	..	..	1 0 9	921 4 2

(b) DIRECTLY BY LOCAL AUTHORITY.

DISTRICT.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
D.—GRIQUALAND EAST.
Kokstad	12 8 0	3 5 8	..	0 12 6	..	..	..	..	33 11 2

From the following Districts "NIL" Returns have been received :—

A.—TEMBULAND.	B.—TRANSKEL.	C.—PONDOLAND.	D.—GRIQUALAND EAST.
Elliot.	Butterworth.	Flagstaff.	Maclear.
Elliotdale.	Idutywa.	Lusikisiki.	Walfish Bay.
Mqanduli.	Nqamakwe.	Willowvale.	

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.
AN N E X U R E "C."

TABLE 6.—1905.

STATEMENT compiled from Returns rendered by the different Resident Magistrates, showing the Expenditure incurred during the year ended 31st December, 1905, under the Health Act, 1883, in dealing with Smallpox in the several districts of the Native Territories (*a*) directly by Government, and (*b*) directly by Local Authority.

DISTRICT.	(a) DIRECTLY BY GOVERNMENT.															Total.
	Combined Total of Expendi- ture Incurred by Govern- ment and Local Authority.	Special Allowances or Pay- ments to District Surgeon (exclusive of Vac- cination).	Travelling Allowances to District Surgeon (exclusive of Vac- cination).	Payments to Private Prac- titioners.	Travelling Allowances to District Surgeon while Vaccinat- ing.	Special Allowances (if any) to District Surgeon for Vac- cinating.	Payments to Lay Vaccina- tors.	Payments to Nurses, Guards, Police, etc.	Cost of Provisions and Supplies.	Cost of Construc- tion, Purchase, or Rent of Hospital Buildings, Huts, Tents, etc.	Cost of Bedding, Clothing, Furniture, Utensils and Equip- ment.	Cost of Medicines.	Transport of Patients and Supplies.	Payments made in respect of Compensa- tion for Infected Private Property Destroyed.	Miscel- laneous Expenses.	
A.—TEMBULAND.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Elliotdale ..	99 12 0	..	..	..	99 12 0	..	..	..	..	..	..	..	..	..	..	99 12 0
Engcobo ..	78 16 3	15 3 0	..	..	63 13 3	..	..	..	..	..	..	..	..	..	..	78 16 3
St. Mark's ..	103 1 6	58 10 0	..	..	44 3 6	..	..	..	0 8 0	..	..	..	..	..	..	103 1 6
Xatanga ..	8 3 6	..	..	..	8 3 6	..	..	..	..	..	..	..	..	..	..	8 3 6
B.—TRANSKEL.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Tsomo ..	65 0 6	..	5 5 0	..	59 15 6	..	..	..	..	..	..	..	..	..	..	65 0 6
Willowvale ..	52 2 6	..	..	..	52 2 6	..	..	..	..	..	..	..	..	..	..	52 2 6
D.—GRIQUALAND EAST.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Kokstad ..	9 0 0	9 0 0	..	..	..	..	..	..	..	..	..	..	..	..	..	9 0 0
Matatiele ..	6 15 0	..	6 15 0	..	76 1 0	..	..	..	..	..	..	..	..	..	..	6 15 0
Mount Ayliff ..	76 1 0	..	..	..	3 0 0	..	..	..	..	..	..	..	..	..	..	76 1 0
Mount Fletcher ..	6 15 0	3 15 0	..	..	90 17 0	..	..	..	..	..	..	..	..	..	..	6 15 0
Mount Frere ..	90 17 0	..	..	..	90 17 0	..	..	..	..	..	..	..	..	..	..	90 17 0
Qumbu ..	69 6 0	..	..	..	69 6 0	..	..	..	..	..	..	..	..	..	..	69 6 0
Umzimkulu ..	25 17 0	..	7 2 6	..	18 14 6	..	..	..	..	..	..	..	..	..	..	25 17 0
WALFISH BAY ..	11 3 6	..	..	..	..	4 13 0	..	3 5 0	2 8 5	..	..	..	..	..	0 17 1	11 3 6
Total ..	702 10 9	12 15 0	92 15 6	..	585 8 9	4 13 0	..	3 5 0	2 16 5	..	..	..	..	..	0 17 1	702 10 9

(b) NO EXPENDITURE HAS BEEN INCURRED DIRECTLY BY THE LOCAL AUTHORITY.

From the following districts "Nil" returns have been received:—

A.—TEMBULAND.
Elliot.
Mqanduli.
Port St. John's.
Untata.

B.—TRANSKEL.
Butterworth.
Iduty wa.
Kentani.
Ngamakwe.

C.—PONDOLAND.
Bizana.
Flagstaff.
Libode.
Ngqeleni.
Tabankulu.
Lusikisiki.

D.—GRIQUALAND EAST.
Maclear.
Tsolo.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "D."

TABLE 1.—1904.

RETURN showing the Number of Lepers on the Register in each District of the Colony Proper, and the manner in which they were dealt with during the Year 1904.

DISTRICT.	FORM OF DISEASE.	RACE.	Total Number of Cases on the Register during the Year 1904.		Number living in the District and on the Register on the 31st December, 1903.		Number of Fresh Cases Registered during the Year 1904.		Number removed from the Register during the Year ended 31st December, 1904.										Number remaining on the Register and being still in the District on the 31st December, 1904.	
									Sent to Asylum.		Died.		Disappeared or Absconded.		Disease arrested or in abeyance.		Found not to be suffering from Leprosy.			
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Albany	Anæsthetic	C	1	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	2
	Mixed ..	C	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Albert	Anæsthetic	C	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
Alexandria ..	Anæsthetic	C	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
Barkly East ..	Anæsthetic	C	2	..	..	..	..	2	1	..	..	..	..	..	..	..	..	1	1	..
Barkly West ..	Anæsthetic	C	1	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..
	Mixed ..	C	1	..	..	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..
Beaufort West ..	Tubercular	C	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
Caledon	Tubercular	E	1	1	..	1	1	1	..	..	1	..	..	1	..	..	..	1	1	..
	Anæsthetic	E	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tubercular	C	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..
Calvinia	Tubercular	E	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Cape†	Unknown	E	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
	Tubercular	C	1	2	..	..	1	2	..	..	..	1	..	..	..	..	..	1	2	..
	Anæsthetic	C	3	1	..	..	3	1	..	..	..	..	..	..	..	..	..	3	1	..
	Mixed ..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
	Unknown	C	1	1	..	..	1	1	..	..	..	..	..	..	..	..	..	1	1	..
Cathcart	Anæsthetic	C	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..
Ceres	Anæsthetic	E	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	..
Cradock	Anæsthetic	C	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
	Mixed ..	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Maraisburg ..	Tubercular	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	E	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
East London ..	Tubercular	C	2	..	..	..	2	..	1	..	..	..	..	..	..	..	..	1	..	..
	Anæsthetic	C	..	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..
Fraserburg ..	Tubercular	E	1	..	1	..	..	..	..	2	..	..	..	1	..	..	..	..	..	..
George	Tubercular	E	5	1	5	1	..	..	3	1	2	..	1	..	..	..	..	..	..	..
Glen Grey	Tubercular	C	3	..	2	..	1	..	..	..	..	..	..	..	..	..	..	3	..	..
	Anæsthetic	C	22	20	16	18	6	2	..	..	..	..	..	..	..	..	..	23	20	..
	Mixed ..	C	3	3	2	3	1	..	..	..	1	..	..	..	..	..	..	3	3	..
Graaff-Reinet ..	Tubercular	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Hanover	Anæsthetic	C	2	..	..	..	2	..	1	..	..	..	1	..	..	..	..	..	..	..
Herbert	Anæsthetic	C	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
Herschel	Tubercular	C	2	6	2	5	1	1	..	..	..	..	..	..	..	..	..	2	6	..
	Anæsthetic	C	12	18	11	18	1	..	..	..	..	..	..	..	..	..	1	12	17	..
	Mixed ..	C	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
Humansdorp ..	Tubercular	C	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Kimberley	Mixed ..	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	2	..	1	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..
	Mixed ..	C	3	..	2	..	1	..	1	..	..	..	..	..	..	..	..	2	..	..
Beaconsfield ..	Tubercular	C	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
King William's Town	Tubercular	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	52	29	44	26	8	3	3	2	1	..	..	..	..	..	..	48	27	..
	Mixed ..	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Keiskama Hoek	Tubercular	C	1	2	..	1	1	1	..	1	..	..	..	..	..	..	..	1	1	..
	Anæsthetic	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Mixed ..	C	..	3	..	1	..	2	..	1	..	1	..	..	..	..	..	..	1	..
Middledrift ..	Mixed ..	C	1	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Komgha	Tubercular	C	4	1	4	..	..	1	2	..	..	..	..	..	..	..	..	2	..	1
	Mixed ..	E	1	1	1	..	..	1	1	1	..	..	..	..	..	..	..	1	..	..
Malmesbury ..	Tubercular	E	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	E	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
	Mixed ..	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
Hopefield	Mixed ..	E	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
	Mixed ..	C	3	2	1	2	1	..	3	2	..	..	..	..	..	..	..	..	..	..
Middelburg ..	Tubercular	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
	Mixed ..	C	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..
Paarl	Tubercular	E	1	..	1	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..
	Anæsthetic	E	3	1	3	1	..	..	1	..	1	..	1	..	1	..	1	..	..	..
	Mixed ..	E	1	..	1	..	2	..	2	..	..	1	..	..	..	..	..	..	..	..
	Anæsthetic	C	3	..	1	..	1	..	2	..	..	1	..	..	..	..	..	..	..	..
	Mixed ..	C	1	1	..	..	1	1	1	1	1	..	..	..	..	..	..	..	1	..
Peddie	Tubercular	C	..	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	..	3	..	..	3	..	..	..	1	..	..	1	..	..	..	..	2	..
	Mixed ..	C	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	1	1	..
Piquetberg ..	Anæsthetic	E	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..
	Mixed ..	E	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..
	Mixed ..	C	2	1	..	..	1	1	2	1	..	..	..	..	..	..	..	..	..	..

* This Leper was erroneously shown in the 1903 return as removed to Asylum. He was not however removed until the 2nd January, 1904, and is therefore correctly shown here as remaining on the Register on 31st December, 1903.

† Includes lepers in the Woodstock and Durbanville area.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE “D.”—Continued.

TABLE 1 (1904)—Continued.

RETURN showing the Number of Lepers on the Register in each District of the Colony Proper, and the manner in which they were dealt with during the Year 1904.

DISTRICT.	FORM OF DISEASE.	RACE.	E. or C.	Total Number of Cases on the Register during the Year 1904.		Number living in the District and on the Register on the 31st December, 1903.		Number of Fresh Cases Registered during the Year 1904.		Number removed from the Register during the Year ended 31st December, 1904.										Number remaining on the Register and being still in the District on the 31st December, 1904.	
										Sent to Asylum.		Died.		Disappeared or Absconded.		Disease arrested or in abeyance.		Found not to be suffering from Leprosy.			
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Port Elizabeth ..	Tubercular ..	C	C	1	1	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
Queenstown ..	Mixed ..	C	C	2	1	..	..	2	1	1	1	1	..	..	..	..	..	..	..	..	..
Riversdale ..	Mixed ..	E	E	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
..	Mixed ..	C	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Simon's Town ..	Tubercular ..	C	C	..	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..
Somerset East ..	Anæsthetic ..	C	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Stellenbosch ..	Tubercular ..	E	E	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Somerset West ..	Tubercular ..	E	E	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
Stockenstrom ..	Anæsthetic ..	C	C	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Tarka ..	Anæsthetic ..	C	C	1	1	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
Taung ..	Anæsthetic ..	C	C	1	2	..	..	1	2	1	1	..	..	..	..	..	..	..	..	..	1
Uitenhage ..	Tubercular ..	C	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Victoria East ..	Tubercular ..	C	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
..	Anæsthetic ..	C	C	1	1	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1
..	Mixed ..	C	C	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..
Vryburg ..	Anæsthetic ..	E	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Willowmore ..	Mixed ..	C	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Wodehouse ..	Anæsthetic ..	E	E	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
..	Anæsthetic ..	C	C	..	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..
..	Mixed ..	C	C	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Indwe ..	Tubercular ..	C	C	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
Worcester ..	Tubercular ..	C	C	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Wynberg ..	Tubercular ..	C	C	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	Anæsthetic ..	C	C	3	2	2	1	1	1	1	..	..	..	..	..	..	..	..	..	2	2
..	Mixed ..	C	C	1	1	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1
Total ..	..	..	..	194	126	113	83	81	43	55	22	10	4	6	1	1	1	1	1	121	97

From the following Districts “NIL” Returns have been received—

- Aberdeen

Adelaide

Venterstad (Albert).

Aliwal North

Lady Grey

Klipdam (Barkly West)

Bathurst

Bedford

Bredasdorp

Britstown

De Aar

Ndabeni Location (Cape)

Carnarvon

Clanwilliam

Colesberg

Fort Beaufort

Williston (Fraserburg)

Gordonia

Rietfontein
- Hay

Hope Town

Jansenville

Kenhardt

Knysna

Kuruman

Ladismith

Laingsburg

Mafeking

Molteno

Montagu

Mossel Bay

Murraysburg

Namaqualand

Oudtshoorn

Calitzdorp

Wellington (Paarl)

Philipstown

Petrusville
- Porterville (Piquetberg)

New Brighton (Port Elizabeth)

Port Nolloth

Prieska

Prince Albert

Sterkstroom (Queenstown)

Richmond

Robertson

Pearston (Somerset East)

Steynsburg

Steytlerville

Stutterheim

Sutherland

Swellendam

Tulbagh

Uniondale

Van Rhynsdorp

Victoria West

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "D."

TABLE 1.—1905.

RETURN showing the Number of Lepers on the Register in each District of the Colony Proper, and the manner in which they were dealt with during the Year 1905.

DISTRICT.	FORM OF DISEASE.	RACE.	Total Number of Cases on the Register during the Year 1905.		Number living in the District and on the Register on the 31st December, 1904.		Number of fresh Cases registered during the Year 1905.		Number removed from the Register during the Year ended 31st December, 1905.										Number remaining on the Register and being still in the District on the 31st December, 1905.	
			M.	F.	M.	F.	M.	F.	Sent to Asylum.		Died.		Disappeared or absconded.		Disease arrested or in abeyance.		Found not to be suffering from Leprosy.			
									M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Albany ..	Anæsthetic	C	2	2	1	2	1	..	1	..	..	..	..	..	..	..	..	..	1	2
Alexandria ..	Mixed ..	C	5	..	..	..	5	..	4	..	1	..	..	..	..	..	..	..	..	1
	Anæsthetic	C	1	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Aliwal North ..	Mixed ..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
Barkly East ..	Anæsthetic	E	..	1	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..
	Tubercular	C	2	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..
Barkly West ..	Anæsthetic	C	2	..	1	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..
	Mixed ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Bathurst ..	Anæsthetic	C	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
Caledon ..	Tubercular	E	1	1	1	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	E	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
	Tubercular	C	..	1	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
	Mixed ..	C	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..
Calvinia ..	Tubercular	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Cape* ..	Unknown	E	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	2	..	..
	Tubercular	C	1	2	1	2	1	1	2	1	2	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	5	2	3	1	2	2	1	3	1	..	..	..	..	..	..	..	1	1
	Mixed ..	C	3	..	1	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..
	Unknown	C	5	3	1	1	4	2	..	1	1	..	..	..	..	..	..	5	3	..
Cathcart ..	Anæsthetic	C	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..
Ceres ..	Anæsthetic	E	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..
East London ..	Tubercular	C	1	..	1	..	1	1	..	..	..	..	..	..	..	..	..	1	..	..
	Anæsthetic	C	1	1	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	1
	Mixed ..	C	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
	Tubercular	C	3	..	3	..	..	..	..	..	1	..	..	..	..	..	..	3	..	..
Glen Grey ..	Anæsthetic	C	22	20	22	20	..	..	..	1	..	..	..	..	..	..	..	21	20	..
	Mixed ..	C	2	3	2	3	..	..	..	..	..	..	..	..	..	..	..	2	3	..
	Anæsthetic	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gordonia ..	Mixed ..	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Hay ..	Tubercular	C	..	1	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..
Herbert ..	Tubercular	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Herschel ..	Tubercular	C	2	6	2	6	..	..	..	..	..	..	..	..	1	..	..	2	5	..
	Anæsthetic	C	12	17	12	17	..	..	..	..	1	..	..	..	..	..	12	16	..	..
	Mixed ..	C	2	..	2	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..
Humansdorp ..	Tubercular	C	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Kimberley ..	Anæsthetic	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Tubercular	C	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	..
	Anæsthetic	C	3	..	1	..	2	..	2	..	..	..	..	..	..	..	..	1	..	..
	Mixed ..	C	3	..	2	..	1	..	2	..	..	..	..	..	..	..	..	1	..	..
Beaconsfield ..	Tubercular	E	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
King William's Town	Tubercular	C	58	30	48	27	10	3	8	2	2	..	..	..	..	..	..	48	28	..
	Anæsthetic																			
	Mixed ..																			
Keiskama Hoek ..	Tubercular	C	3	5	1	1	2	4	2	3	..	..	..	..	..	..	..	1	2	..
Middeldrift ..	Anæsthetic	C	..	3	..	1	..	2	..	1	..	..	..	..	..	..	..	..	2	..
	Mixed ..																			
Knysna ..	Mixed ..	E	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
Komgha ..	Mixed ..	C	2	1	2	1	..	..	..	..	..	..	..	..	..	..	..	2	1	..
Ladismith ..	Tubercular	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Mafeking ..	Mixed ..	C	1	1	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	..
Malmesbury ..	Tubercular	E	..	1	..	..	1	1	..	1	..	..	..	..	..	..	..	..	1	..
	Anæsthetic	E	2	..	1	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..
	Tubercular	C	2	1	..	..	2	1	1	..	..	..	..	..	..	..	..	1	1	..
	Anæsthetic	C	3	..	..	..	3	..	3	..	..	..	..	..	..	..	..	..	..	..
Hopefield ..	Mixed ..	E	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
	Tubercular	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Mixed ..	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Middelburg ..	Mixed ..	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Murraysburg ..	Anæsthetic	C	3	..	1	..	2	..	3	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	C	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Paarl ..	Tubercular	E	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Wellington ..	Tubercular	C	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tubercular	E	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..

* Includes lepers in Woodstock and Durbanville areas.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE “D.”—Continued.

TABLE 1.—1905.—Continued.

RETURN showing the Number of Lepers on the Register in each District of the Colony Proper, and the manner in which they were dealt with during the Year 1905.

DISTRICT.	FORM OF DISEASE.	E. or C.	RACE.		Total Number of Cases on the Register during the Year 1905.		Number living in the District and on the Register on the 31st December, 1904.		Number of fresh Cases registered during the Year 1905.		Number removed from the Register during the Year ended 31st December, 1905.										Number remaining on the Register and being still in the District on 31st December, 1905.	
			M.	F.	M.	F.	M.	F.	Sent to Asylum.		Died.		Disappeared or absconded.		Disease arrested or in abeyance.		Found not to be suffering from Leprosy.		M.	F.		
									M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.
Peddie	Tubercular ..	C	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	Anæsthetic ..	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	Mixed ..	C	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Philipstown ..	Anæsthetic ..	C	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..
Petrusville ..	Anæsthetic ..	E	2	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..
Piquetberg ..	Anæsthetic ..	E	..	1	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
	Mixed ..	E	4	1	..	2	..	2	..	3	1	..	..	..	..	..	..	..	1	..	..
	Anæsthetic ..	C	1	1	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
	Mixed ..	C	1	1	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
Port Elizabeth ..	Tubercular ..	C	2	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
Queenstown ..	Mixed ..	E	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..
Riversdale ..	Mixed ..	C	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
Somerset East ..	Anæsthetic ..	C	1	1	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
Pearston ..	Anæsthetic ..	C	1	1	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	1	..
Stellenbosch ..	Tubercular ..	E	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Tubercular ..	C	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
	Anæsthetic ..	C	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Somerset West ..	Tubercular ..	E	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Steynsburg ..	Anæsthetic ..	C	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Stockenström ..	Tubercular ..	C	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..
Tarka ..	Anæsthetic ..	C	1	1	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
Taung ..	Anæsthetic ..	C	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Tulbagh ..	Anæsthetic ..	C	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
Uniondale ..	Anæsthetic ..	C	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Van Rhynsdorp ..	Tubercular ..	C	1	1	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..
Victoria East ..	Tubercular ..	C	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
	Anæsthetic ..	C	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
	Mixed ..	C	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
Victoria West ..	Mixed ..	C	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..
Vryburg ..	Mixed ..	E	1	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	1	..	..
Wodchouse ..	Anæsthetic ..	E	2	..	1	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..
	Mixed ..	C	1	1	..	..	..	1	1	..	..	..	1	..	..	..	..	1	..	..	..
Indwe ..	Mixed ..	C	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..
Worcester ..	Tubercular ..	E	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Tubercular ..	C	1	1	..	1	1	1	..	1	..	..	..	..	..	..	..	..	..	1	..
Wynberg ..	Tubercular ..	C	3	1	..	1	3	..	3	..	..	..	..	..	..	..	..	..	..	1	..
	Anæsthetic ..	C	2	2	2	2	..	2	..	..	..	..	..	..	..	..	..	..	2	2	..
	Mixed ..	C	2	2	..	1	2	1	1	1	1	1	1	..	..	..	..	..	..	1	..
Total			215	136	121	97	94	39	75	27	8	2	6	1	..	1	1	3	125	102		

From the following Districts “NIL” Returns have been received:—

- Aberdeen.
Adelaide.
Albert.
Venterstad.
Lady Grey (Aliwal North).
Klipdam (Barkly West).
Beaufort West.
Bedford.
Bredasdorp.
Britstown.
De Aar.
Ndabeni Location (Cape).
Carnarvon.
Clanwilliam.
Colesberg.
Cradock.
Maraisburg.
Fort Beaufort.
- Fraserburg.
Williston.
George.
Rietfontein (Gordonia).
Graaff-Reinet.
Hanover.
Hope Town.
Jansenville.
Kenhardt.
Kuruman.
Laingsburg.
Molteno.
Montagu.
Mossel Bay.
Namaqualand.
Oudtshoorn.
Calitzdorp.
Porterville (Piquetberg).
- New Brighton (Port Elizabeth).
Port Nolloth.
Prieska.
Prince Albert.
Sterkstroom (Queenstown).
Richmond.
Robertson.
Simon's Town.
Steytlerville.
Stutterheim.
Sutherland.
Swellendam.
Uitenhage.
Willowmore.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "D."

TABLE 2.—1904.

RETURN showing the Number of Lepers on the Register in each District of the Native Territories, and the manner in which they were dealt with during the Year 1904.

DISTRICT.	FORM OF DISEASE.	E. or C.	RACE.	Total number of cases on the Register during the year 1904.		Number living in the District and on the Register on the 31st December, 1903.		Number of fresh cases registered during the year 1904.		Number removed from the Register during the year ended 31st December, 1904.										Number remaining on the Register and being still in the District on the 31st December, 1904.	
				M.	F.	M.	F.	M.	F.	Sent to Asylum.		Died.		Disappeared or absconded.		Disease arrested or in abeyance.		Found not to be suffering from Leprosy.			
										M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—TEMBULAND.																					
Elliot	Anæsthetic	..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Elliotdale ..	Anæsthetic	..	C	7	2	3	..	4	2	..	..	..	..	..	..	..	..	..	..	7	2
Engcobo	Mixed ..	..	C	3	1	2	1	1	..	..	..	..	1	..	..	..	..	..	..	3	..
	Tubercular	..	C	15	9	13	5	2	4	..	1	1	..	1	..	..	..	..	13	8	
	Mixed ..	..																		
Mqanduli ..	Anæsthetic	..	C	5	2	4	2	1	..	..	..	1	1	..	..	..	..	..	..	4	1
	Mixed ..	..	C	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Port St. John's	Tubercular	..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
St. Mark's ..	Tubercular	..	C	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	..	C	2	4	1	3	1	1	1	2	1	..	..	..	..	..	..	..	..	2
Umtata	Mixed ..	..	C	..	2	..	2	..	..	1	..	..	..	1	..	..	..	..	..	..	..
	Mixed ..	..	C	3	4	2	4	1	..	..	1	..	..	..	..	1	..	..	..	3	3
Xalanga	Mixed ..	..	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
B.—TRANSKEL.																					
Butterworth ..	Mixed ..	..	C	10	7	10	6	..	1	1	4	..	..	..	..	..	..	..	..	9	3
Idutywa	Tubercular	..	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	..	C	2	1	2	1	..	..	..	..	1	..	..	..	..	..	..	..	2	1
Kentani	Mixed ..	..	C	13	10	13	10	..	..	..	..	1	..	..	..	..	..	..	..	12	10
	Anæsthetic	..	C	13	14	7	3	6	11	6	8	..	..	..	..	..	..	..	..	7	6
Ngamakwe ..	Mixed ..	..	C	2	1	2	1	..	..	1	..	..	..	..	..	..	..	..	..	2	..
	Mixed ..	..	C	10	9	7	8	3	1	1	..	..	..	..	..	..	..	..	..	9	9
Tsomo	Mixed ..	..	C	6	2	5	2	1	..	3	1	..	..	..	..	..	..	..	..	3	1
Willowvale ..	Tubercular	..	C	1	2	..	..	1	2	1	2	..	..	..	..	..	..	..	..	..	..
	Anæsthetic	..	C	..	1	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..
	Mixed ..	..	C	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
C.—PONDOLAND.																					
Libode	Tubercular	..	C	1	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Ngqeleni ..	Mixed ..	..	C	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..
	Tubercular	..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tabankulu ..	Mixed ..	..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Mixed ..	..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Lusikisiki ..	Anæsthetic	..	C	3	2	3	2	..	..	..	..	..	..	..	..	..	..	..	..	3	2
D.—GRIQUALAND EAST.																					
Kokstad	Tubercular	..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
	Anæsthetic	..	C	8	12	5	11	3	1	..	..	2	..	..	..	..	..	..	..	6	12
	Mixed ..	..	C	2	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	2	1
Maclear	Tubercular	..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
	Anæsthetic	..	C	..	3	..	1	..	2	..	3	..	..	..	..	..	..	..	..	..	..
	Mixed ..	..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Matatiele ..	Anæsthetic	..	C	15	5	13	4	2	1	..	..	5	..	..	..	..	..	..	..	10	5
Mount Ayliff ..	Mixed ..	..	C	..	4	..	3	..	1	..	..	..	..	..	..	..	..	..	..	5	4
Mount Fletcher	Anæsthetic	..	C	5	..	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Frere ..	Tubercular	..	C	16	4	15	4	1	..	..	..	..	..	..	..	..	..	..	..	16	4
Qumbu	Tubercular	..	C	..	3	..	3	..	..	..	..	1	..	..	..	..	..	..	..	..	2
	Anæsthetic	..	C	5	5	5	3	..	2	3	4	1	1	1	1	..	..	..	..	..	..
	Mixed ..	..	C	..	2	..	2	..	..	2	..	..	1	..	1	..	..	..	..	..	..
	Anæsthetic	..	C	5	2	1	..	4	2	2	..	..	..	..	1	..	..	..	..	3	1
Tsolo	Mixed ..	..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Umziinkulu ..	Anæsthetic	..	C	13	9	11	4	2	5	7	..	..	..	..	..	..	..	..	..	6	9
	Mixed ..	..	C	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total				180	126	131	89	49	37	31	30	13	4	2	4	..	..	..	..	134	88

* The R.M. reports that the Return rendered for 1903, which showed 2 females as remaining on the Register, was incorrect, whereas, in fact, 2 males and 4 females were living in the District and remained on the Register at that period.

"NIL" G (Leper) Returns received from the following Districts:—

Bizana. Flagstaff. Walfish Bay.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY

ANNEXURE "D."

TABLE 2.—1905.

Return showing the number of Lepers on the Register in each district of the Native Territories, and the manner in which they were dealt with during the year 1905 :—

DISTRICT.	FORM OF DISEASE.	RACE.	Total number of Cases on the Register during the Year 1905.		Number living in the District and on the Register on the 31st December, 1904.		Number of Fresh Cases Registered during the Year 1905.		Number removed from the Register during the Year ended 31st December, 1905.										Number remaining on the Register and being still in the District on the 31st December, 1905.		
			M.	F.	M.	F.	M.	F.	Sent to Asylum.		Died.		Disappeared or Absconded.		Disease Arrested or in Abeyance.		Found not to be suffering from Leprosy.				
									M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—TEMBULAND.																					
Elliot	Anæsthetic ..	C	1	2	1	2	..	2	1	..	
Elliotdale ..	Anæsthetic ..	C	7	2	7	2	..	..	..	..	..	..	..	..	..	..	..	7	2
	Mixed ..	C	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	3	..
Engcobo	Tubercular ..	C	19	9	13	8	6	1	9	3	2	..	3	1	3	1	..	2	4		
	Anæsthetic ..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Mixed ..	C	4	2	4	1	..	1	1	1	..	..	..	..	..	..	..	3	1
Mqanduli ..	Anæsthetic ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Port St. John's ..	Tubercular ..	C	4	2	..	2	4	..	4	..	..	..	..	..	..	..	..	..	2
St. Mark's ..	Anæsthetic ..	C	..	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..
	Mixed ..	C	7	5	3	3	4	2	5	4	1	..	..	..	..	..	..	1	1
Umtata	Mixed ..	C	2	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..
Xalanga	Mixed ..	C	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B.—TRANSKEI.																					
Butterworth ..	Mixed ..	C	12	5	9	3	3	2	2	2	..	..	..	..	..	..	..	10	3
Idutywa	Anæsthetic ..	C	2	1	2	1	..	..	..	..	..	..	..	..	..	..	..	2	1
	Mixed ..	C	12	10	12	10	..	..	..	..	..	..	..	..	..	..	..	12	10
Kentani	Anæsthetic ..	C	11	6	7	6	4	..	3	1	..	..	..	..	..	..	..	8	5
	Mixed ..	C	4	3	2	..	2	3	1	..	..	..	..	..	..	..	..	3	3
Nqamakwe ..	Mixed ..	C	11	13	9	9	2	4	4	..	1	1	..	..	..	..	..	6	12
Tsomo	Mixed ..	C	4	1	3	1	1	..	2	..	..	2	..	..	..	..	..	..	1
Willowvale ..	Anæsthetic ..	C	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
C.—PONDOLAND.																					
Bizana	Anæsthetic ..	C	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Libode	Tubercular ..	C	3	2	..	1	3	1	..	..	..	..	..	..	..	..	..	3	2
	Mixed ..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Ngqeleni ..	Tubercular ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Mixed ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Tabankulu ..	Tubercular ..	C	3	2	..	..	3	2	1	..	1	..	..	..	..	..	..	1	2
	Mixed ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Lusikisiki ..	Anæsthetic ..	C	3	2	3	2	..	..	..	..	..	..	..	..	..	..	..	3	2
D.—GRIQUALAND EAST.																					
Kokstad	Tubercular ..	C	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
	Anæsthetic ..	C	10	14	6	12	4	2	5	3	2	..	..	1	..	..	..	3	10
	Mixed ..	C	2	1	2	1	..	..	1	..	..	..	..	..	..	..	..	1	1
Maclear	Tubercular ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Mixed ..	C	2	..	1	..	1	..	2	..	..	..	..	..	..	..	..	..	..
Matatiele ..	Anæsthetic ..	C	11	5	10	5	1	..	..	..	2	..	..	..	..	..	..	9	5
Mount Ayliff ..	Anæsthetic ..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
	Mixed ..	C	1	4	..	4	1	..	1	4	..	..	..	..	..	..	..	..	..
Mount Fletcher ..	Anæsthetic ..	C	6	2	5	..	1	2	4	..	1	..	1	..	..	..	..	..	2
Mount Frere ..	Tubercular ..	C	16	4	16	4	..	..	..	..	..	..	..	..	..	..	..	16	4
Qumbu	Tubercular ..	C	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	2
	Anæsthetic ..	C	2	2	..	..	2	2	..	1	..	..	..	..	..	..	1	1	1
	Mixed ..	C	4	..	..	..	4	..	2	..	..	..	..	..	..	1	..	1	..
Tsolo	Anæsthetic ..	C	5	4	3	1	2	3	1	1	..	1	1	..	..	1	..	2	2
	Mixed ..	C	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Umzimkulu ..	Anæsthetic ..	C	21	17	6	9	15	8	5	10	2	..	..	..	..	..	..	14	7
	Mixed ..	C	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Total			201	127	134	88	67	39	57	34	13	3	7	2	3	1	2	1	119	86	

NIL "G" (Leper) returns received from the following districts :—

Flagstaff.

Walfish Bay.

ANNEXURE "E."
Statistical Returns under "The Contagious Diseases Prevention Act, 1885."
TABLE 1.—1904.

TABLE showing for the several districts of the Colony Proper the number of persons treated under the provisions of Part II. of "The Contagious Diseases Prevention Act, 1885," during the year 1904, together with the condition of treatment and the result :—

DISTRICT.	IN HOSPITAL.						OUTDOOR.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Total Number of Patients treated during the Year 1904.		Number of Fresh Cases coming under treatment during 1904.			Number of Discharges during Year 1904.			Number of Patients remaining under treatment on 31st Dec. 1904.			Average Daily Number of Patients under treatment.		Average Duration of Treatment per Patient (in days).		Number of Discharges during Year 1904.						Average Daily Number of Patients under treatment.		Average Duration of Treatment per Patient (in days).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Per-sons.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F

[illegible]

“NII.” E Returns (Patients treated under Part II. of the C.D. Act) received from the following Districts of the Colony proper;—

Adelaide	East London	Montagu	Sterkstrom (Queenstown)	Barrydale (Swellendam)
Venterstad (Albert)	Fort Beaufort	Peddie	Simon's Town	Tulbagh
Lady Grey (Aliwal North)	Williston (Fraserburg)	Petrusville (Philipstown)	Somers West (Stellenbosch)	Victoria East
Barkly East	Rietfontein (Gordonia)	Piquetberg	Steynsburg	Wodehouse
Rhodes	Herschel	Port Elizabeth	Stutterheim	Indwe
Klipdam (Barkly West)	Laingsburg	Whittlesea (Queenstown)		Woodstock

NATIVE TERRITORIES, 1904.

With the following exceptions, from all the districts in the Native Territories "Nil" returns were received:—
 outdoor treatment, and remained under treatment on the 31st December, 1904.

In Xalanga 1 coloured female received outdoor treatment, and remained under treatment on the 31st December, 1904.
In Butterworth 2 coloured males and 2 coloured females received outdoor treatment, of whom 1 female was cured, 2 males lapsed, and 1 female remained under treatment on the 31st Dec., 1904.
In Kentani 3 coloured females received outdoor treatment, of whom 1 was cured, 1 died, and 1 lapsed.
In Bizana 9 coloured males and 18 coloured females received outdoor treatment, of whom 3 males and 5 females were cured, 2 males died, 1 male lapsed, and 13 females remained under treatment on the 31st December, 1904.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "E."
Statistical Returns under "The Contagious Diseases Prevention Act, 1885."

TABLE 1.—1905.

TABLE showing for the several Districts of the Colony Proper the number of persons treated under the provisions of Part II. of "The Contagious Diseases Prevention Act, 1885," during the Year 1905, together with the condition of treatment and the result.

DISTRICT.	IN HOSPITAL.										OUTDOOR.												
	Total Number of Patients treated during the Year 1905.		Number of Patients remaining under treatment on the 31st December, 1904.		Number of Fresh Cases coming under treatment during 1905.		Number of discharges during Year 1905.				Number of Patients remaining under treatment on the 31st December, 1905.		Average daily Number of Patients under treatment.		Average duration of treatment per Patient in days.		Number of Discharges during Year 1905.						
	Per-sons.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Aberdeen	12	5	7	1	1	24	10	13	10	1	1	10	1	2	2.46	91	34	4	1	1	2.73	2.86	170
Albany	36	25	11	3	..	..	..	..	..	..	..	..	..	..	2.71	130	..	1	..	..	..	..	92
Alexandria	5	2	3	7	..	1	..	..	..	..	..	1	..	..	25	92	..	7	..	..	..	..	45
Aliwal North	9	2	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jamestown	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..
Barkly West	*3	3	..	1	..	2	..	2	..	1	..	1	..	..	42	52	..	..	..	..	..	..	..
Klipdam	6	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	20
Bathurst	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	202
Beaufort West	15	11	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	10	3	1	..	..
Britstown	31	14	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3	7	4	..	..
De Aar	9	4	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	2	..	148
Caledon	18	9	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	2	..	62
Calvinia	11	5	6	3	2	2	4	4	4	..	..	..	..	1	1.31	93	..	7	2	4	3	..	115
Cape	62	..	62	..	3	..	59	51	51	..	..	..	..	7	11.55	68	..	..	..	..	..	..	..
Carnarvon	16	3	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	3	..	..	..
Cathcart	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.	Information unobtainable.
Ceres	1	1	..	..	..	3	8	3	4	..	..	..	..	..	..	..	..	1	..	..	..	..	125
Glanwilliam	15	6	9	2	4	1	..	1	1	1	..	..	..	..	2.13	153	..	2	1	..	..	..	..
Colesberg	13	7	6	..	..	..	..	1	..	..	..	..	..	..	1.86	295	..	1	..	..	..	..	..
Fraserburg	4	3	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
George	23	11	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..
Gordonia	20	9	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	6	5	5	..	..
New Bethesda (Graaff-Reinet)	4	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	4	..	..
Hanover	12	3	9	2	2	9	13	1	1	..	..	2	..	8	6.27	191	..	..	..	..	..	..	..
Hay	26	11	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hope Town	23	13	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Humansdorp	10	6	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jansenville	33	15	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kenhardt	8	2	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kimberley	231	197	34	22	3	175	31	126	28	9	45	2	37.69	4.50	67	..	..	..	..	..	..	..	..
King William's Town	67	24	43	1	2	23	41	22	40	..	..	..	2.24	3.39	31	..	..	..	..	..	..	..	..
Keiskama Hoek	9	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middelburg	12	5	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "E."

Statistical Returns under "The Contagious Diseases Prevention Act, 1885."

TABLE 2.—1905.

TABLE showing for the several districts of the Colony Proper, the Race, and whether Child or Adult, of the persons treated under the provisions of Part II. of "The Contagious Diseases Prevention Act, 1885," during the year 1905, together with the nature of the disease.

District.	Total.						Primary.						Secondary.						Tertiary.						Hereditary.			Other Venereal Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Under 14 years of age.			Over 14 years of age.			Under 14 years of age.			Over 14 years of age.			Under 14 years of age.			Over 14 years of age.			Under 14 years of age.			Over 14 years of age.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	M.	F.	C.	E.	M.	F.	C.	E.	M.	F.	C.	E.	M.	F.	C.	E.	M.	F.	C.	E.	M.	F.	C.	M.	F.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "E."

Statistical Returns under "The Contagious Diseases Prevention Act, 1885."

TABLE 3 (1904.)

Statement showing the Expenditure incurred during the Year 1904 in carrying out the provisions of Part II. of "The Contagious Diseases Prevention Act, 1885," in the several districts of the Colony Proper, according to Returns rendered by the Resident Magistrates thereof.

DISTRICT.	District Surgeon's Travelling Expenses.	District Surgeon's Fixed Allowance.	District Surgeon's Fee for Medical Attendance and Medicine.	Cost of Buildings, Construction and Repairs.	Rent of Buildings.	Cost of Furniture Utensils and Fittings.	Cost of Bedding and Clothing.	Cost of Provisions Medical Comforts, Fuel, Light, Soap, Lime, and other Supplies or Services.	Salaries and Allowances of Nurses, Attendants, Guards, etc.	Payments to Managers of General Hospitals for Treatment and Maintenance of C.D. cases.	Miscellaneous or Special Expenses.	Total.
Aberdeen...	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Albany	18 7 6	1 0 0	...	...	...	10 10 1	16 11 0	...	...	46 8 7
Albert	95 2 6	...	95 2 6
Alexandria	1 17 6	...	...	...	...	6 0 10	...	...	...	7 18 4
Aliwal North	6 14 9	...	...	...	...	31 2 3	9 3 7	...	...	47 0 7
Barkly West ...	14 12 6	...	3 7 6	...	...	...	...	...	...	...	2 17 3	6 4 9
Beaufort West	63 18 6	...	4 10 0	...	34 7 5	333 15 4	24 0 0	...	...	475 3 9
Britstown ...	2 5 0	...	16 1 4	...	...	...	...	79 10 3	83 11 6	...	2 11 5	181 14 6
De Aar	84 19 0	...	...	...	...	355 0 11	48 0 0	...	...	490 4 11
Caledon ...	8 5 0	75 0 0	9 0 0	...	...	...	...	...	...	...	...	9 0 0
Calvinia	25 10 0	...	...	...	...	87 3 6	27 15 8	...	...	223 14 2
Carnarvon	34 4 3	6 2 0	...	0 3 0	4 2 11	104 13 8	29 3 4	...	...	178 6 2
Ceres	45 19 3	...	...	...	1 17 1	132 12 11	71 4 11	...	...	251 17 2
Clanwilliam	0 15 0	...	...	...	...	2 9 5	0 10 0	...	...	3 14 5
Colesberg...	73 6 6	...	...	...	...	291 12 9	66 2 6	...	...	431 1 9
Craddock	92 12 6	...	...	...	...	348 5 2	18 0 0	...	...	458 17 8
East London ...	1 10 0	...	22 8 9	0 4 0	...	...	2 6 0	91 18 10	42 0 0	...	1 5 9	160 3 4
Fraserburg	0 7 6	...	...	...	...	...	...	...	...	1 17 6
George	16 1 0	...	...	...	...	15 10 3	10 4 3	...	...	41 15 6
Glen Grey	53 16 0	...	...	...	...	...	...	...	...	53 16 0
Gordonia...	1 10 0	...	...	...	...	...	...	...	...	1 10 0
Graaff-Reinet	46 16 5	...	...	...	...	16 14 2	...	...	...	63 10 7
Hanover	0 15 0	...	...	...	...	...	...	...	...	0 15 0
Hay	31 6 3	...	...	...	...	38 17 9	15 5 0	...	...	85 9 0
Hope Town ...	13 14 0	...	30 12 3	...	...	...	...	140 9 9	69 17 1	...	2 0 0	260 19 1
Humansdorp	80 2 9	...	...	...	...	72 9 3	25 5 0	...	...	191 11 0
Jansenville	1 6 7	...	...	...	...	...	...	...	...	1 6 7
Kenhardt	68 0 0	...	...	...	...	...	...	...	...	68 0 0
Kimberley	23 1 6	...	1 11 1	...	...	30 7 2	...	...	...	54 19 9
King William's Town...	2,023 1 0	...	2,023 1 0
Keiskama Hoek	23 11 3	...	...	...	...	108 10 0	...	...	...	108 10 0
Middledrift	40 0 0	...	...	...	...	...	...	...	...	23 11 3
Knysna	15 2 6	...	...	...	...	...	...	...	...	40 0 0
Kounga	0 15 0	...	...	...	...	...	...	...	...	15 2 6
Kuruman	423 7 3	35 0 0	...	...	6 6 7	905 17 6	2 2 0	...	...	7 2 0
									164 17 6		5 10 0	1,540 18 10

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "E."

Statistical Returns under "The Contagious Diseases Prevention Act, 1885."

TABLE 3.—1905.

Statement showing the Expenditure incurred during the year 1905, in carrying out the provisions of Part II. of "The Contagious Diseases Prevention Act, 1885," in the several districts of the Colony proper, according to Returns rendered by the Resident Magistrates thereof.

DISTRICT.	District Surgeon's Travelling Expenses.	District Surgeon's Fixed Allowance.	District Surgeon's Fee for Medical Attendance and Medicine.	Cost of Buildings, Construction and Repairs.	Rent of Buildings.	Cost of Furniture, Utensils and Fittings.	Cost of Bedding and Clothing.	Cost of Provisions, Medical Comforts, Fuel, Light, Soap, LIME and other Supplies or Services.	Salaries and Allowances of Nurses, Attendants, Guards, etc.	Payments to Managers of Hospitals for Treatment and Maintenance of C.D. Cases.	Miscellaneous or Special Expenses.	Total:
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Aberdeen	25 10 0	...	...	...	...	0 3 4	0 10 8	...	...	26 4 0
Albany	84 15 0	...	84 15 0
Alexandria	8 12 9	...	...	...	...	4 6 1	1 13 0	...	...	14 11 10
Aliwal North	3 11 6	...	...	...	...	...	...	...	...	7 2 6
Barkly West	28 10 0	...	0 18 6	...	...	...	...	12 6 11	10 0 0	...	0 5 8	54 14 1
Klipdam	3 15 0	...	...	...	...	...	...	...	...	0 18 6
Bathurst	13 6 5	...	...	...	...	...	...	...	...	3 15 0
Beaufort West	8 11 0	...	59 7 6	...	...	...	...	...	...	...	6 7 1	28 4 6
Britstown	7 0 5	...	...	...	...	...	...	...	...	59 7 6
De Aar	60 3 0	...	0 17 0	...	...	88 6 9	27 15 8	...	...	7 0 5
Caledon	10 19 3	...	12 19 3	...	...	...	...	56 3 2	30 0 0	...	...	188 1 8
Calvinia	25 10 0	...	...	...	...	...	...	...	...	99 2 5
Carnarvon	1 2 6	...	...	...	...	...	...	...	...	25 10 0
Cathcart	1 2 6
Ceres	0 11 9	...	...	...	0 11 9
Clanwilliam	30 14 6	...	...	...	...	49 7 7	69 5 0	...	...	149 7 1
Colesberg	47 12 6	...	...	...	...	129 13 7	18 0 0	...	...	195 6 1
Fraserburg	3 7 6	...	...	...	...	...	...	...	...	3 7 6
George	48 16 3	...	...	...	...	...	...	...	...	48 16 3
Gordonia	55 14 10	...	...	...	...	6 10 6	...	...	...	62 5 4
Graaff-Reinet	1 10 0	...	...	...	...	...	...	...	...	1 10 0
Hanover	34 3 3	...	...	...	...	24 16 1	...	...	...	58 19 4
Hay	45 1 6	...	...	...	...	238 18 11	66 15 0	...	...	401 14 8
Hope Town	81 18 9	0 7 0	18 0 0	...	32 19 3	...	...	...	3 3 0	119 13 0
Humansdorp	14 7 3	...	...	...	...	...	...	...	...	14 7 3
Jansenville	90 0 0	...	...	...	...	...	...	...	...	90 0 0
Kenhardt	8 4 6	...	...	...	...	9 2 11	...	...	...	17 7 5
Kimberley	2,393 18 6	...	2,393 18 6
Keiskama Hoek (King William's Town)	60 18 11	...	...	...	...	...	...	...	...	60 18 11
Middledrift	18 0 0	...	...	...	...	...	...	...	...	18 0 0
Knysna	14 2 9	...	...	...	...	...	...	...	...	14 2 9
Kuruman	321 14 3	...	...	...	17 13 5	635 12 3	158 14 2	...	2 0 0	1,135 14 1

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "E."

STATISTICAL RETURNS under "The Contagious Diseases Prevention Act, 1885."

TABLE 5.

Comparative Table showing the Results of the Working of Part I. (Females) of "The Contagious Diseases Prevention Act, 1885," during the Years 1903, 1904 and 1905.

	CAPE TOWN.			WYNBERG.			SIMON'S TOWN.			EAST LONDON.			KING WILLIAM'S TOWN.			PORT ELIZABETH.			UITENHAGE.			UMTATA.			ALL DISTRICTS.		
	1903	1904	1905	1903	1904	1905	1903	1904	1905	1903	1904	1905	1903	1904	1905	1903	1904	1905	1903	1904	1905	1903	1904	1905	1903	1904	1905
Number of Individual Women examined	238	118	118				45	45	47		33	34	9	15	13	134	108	79	15	11	9	38	27	512	394	348	
Number of separate periodical Medical Examinations.	995	434	372				1,128	1,515	1,344	41	159	148	39	64	58	1,545	1,171	644	98	114	50	132	172	4,258	3,911	3,076	
Number of Individual Women found Diseased	31	30	40	6	10	4	37	23	9	19	6	10	4	4	3	45	29	46	4	3	...	13	15	146	122	125	
Number of Admissions to Hospital	36	46	48	6	10	4	37	23	11	25	* 7	13	4	6	4	45	29	46	3	3	...	17	15	157	141	141	
Average duration of stay in Hospital (in days)	55	33·4	35·8	...	39	42·7	48	37·8	68	...	77·4	28·6	36	28·8	26	36·5	45·8	40·5	36·5	45·8	...	105	91	44	48	45	
Number of Voluntary Submissions	238	118	118	30	26	21	38	39	43	41	33	34	9	15	...	102	78	53	9	7	7	2	467	316	278		
Number of Prosecutions under the Act	8	5	14	1	1	...	4	11	9	...	...	...	...	4	...	47	45	54	2	3	6	...	62	69	83	
Total Expenditure	£1,847 14 3	£1,318 10 4	£1,288 12 5	£181 7 6	£190 13 3	£190 11 4	£687 11 0	£307 13 8	£238 14 8	£74 4 11	£66 8 9	£71 13 11	£321 13 0	£236 13 0	£386 12 11	£862 1 1	£863 19 7	£811 2 11	£101 13 1	£101 12 3	£26 16 4	£194 0 0	£4,075 14 10	£3,777 14 10	£3,211 4 6		
...	

* There were actually only five admissions to hospital during 1904. One woman was examined while a prisoner, and cured before her discharge from gaol; another woman was diseased twice, the first time while a prisoner, and treated before her discharge from gaol.

TABLE 6.

Comparative Table showing in Ratios per centum the Results of the Working of Part I. (Females) of "The Contagious Diseases Prevention Act, 1885," during the Years 1903, 1904 and 1905.

Proportion of separate Examinations per woman	4·2	3·7	3·2	6·4	12·4	13·7	25·1	33·7	28·6	6·4	4·8	4·4	4·3	4·3	4·5	11·5	10·8	8·2	6·5	10·4	5·6	3·5	6·4	8·3	9·9	8·8
Proportion of individuals found to be diseased per centum of women examined.	13·0	25·4	33·8	20·0	38·5	19·0	82·2	51·1	19·1	46·3	18·2	29·4	44·4	26·7	23·1	33·6	26·9	58·2	26·7	27·3	...	44·7	48·1	28·5	31·0	35·9
Proportion of separate admissions to hospital per centum of women examined.	15·1	39·0	40·7	20·0	38·5	19·0	82·2	51·1	23·4	61·0	21·2	38·2	44·4	40·0	30·8	33·6	26·9	58·2	26·7	27·3	...	44·7	55·6	30·7	35·8	40·5
Proportion of re-admissions to hospital per centum of diseased women.	16·1	53·3	20·0	0·0	0·0	0·0	0·0	0·0	22·2	31·6	16·7	30·0	0·0	50·0	33·3	0·0	0·0	0·0	0·0	0·0	...	0·0	15·4	7·5	15·6	12·8
Proportion of admissions to hospital per centum of separate examinations.	3·6	10·6	12·9	3·1	3·1	1·4	3·3	1·5	0·8	9·6	4·4	8·8	10·3	9·4	6·9	2·9	2·5	7·1	4·1	2·6	...	12·9	8·7	3·7	3·6	4·6
Proportion of voluntary submissions per centum of women examined.	100·0	100·0	100·0	100·0	100·0	100·0	84·4	86·7	91·5	100·0	100·0	100·0	100·0	100·0	100·0	76·1	72·2	67·1	60·0	63·6	77·8	0·0	7·4	91·2	80·2	79·9
Proportion of Prosecutions per centum of women examined.	3·4	4·2	11·9	3·3	3·8	0·0	8·8	24·4	19·1	0·0	0·0	0·0	0·0	26·7	0·0	35·1	41·7	68·4	13·3	27·3	66·7	...	...	12·1	17·5	23·9

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "E."

Statistical Returns under "The Contagious Diseases Prevention Act, 1885."

TABLE 7.

RETURN of Expenditure incurred during the Years 1903, 1904 and 1905, in connection with Part I of "The Contagious Diseases Prevention Act, 1885," in respect of each District in which this part of the Act is in operation.

SERVICE.	CAPE TOWN.			WYNBERG.			SIMON'S TOWN.			EAST LONDON.			KING WILLIAM'S TOWN.		
	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.
1. Cost of Buildings, Construction and Repairs	£ s. d. 154 17 10	£ s. d. 128 9 10	£ s. d. 105 19 7	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. 0 7 6	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. 19 12 7
2 Cost of Furniture, Utensils and Fittings	4 4 6	10 6 8	...	...	...	...	...	1 0 10	...	...	...	...	...	...	...
3. Cost of Bedding and Clothing ...	28 0 6	55 5 2	54 2 8	...	...	...	...	5 17 1	...	...	...	...	...	...	...
4. Cost of Provisions, Medical Com- forts, Fuel, Light, Soap, Lime, and other supplies or Services	*491 14 8	*485 19 2	*315 4 5	...	...	...	303 10 3	204 7 3	...	...	...	...	110 10 0	50 12 0	*149 16 6
5. Salaries and Allowances : Medical Inspector ... Lay Assistant ... Matron, Nurses, Attendants, Guards, &c.	539 11 4 220 0 0 390 16 8	201 14 7 242 11 8 374 5 0	100 0 0 220 0 0 271 1 1	75 0 0 96 0 0 12 0 0	75 0 0 96 0 0 12 0 0	75 0 0 96 0 0 12 0 0	200 0 0 84 0 0 99 0 0	162 10 0 59 18 1 73 2 0	106 5 0 109 3 3 21 14 5	50 0 0 12 0 0 12 0 0	50 0 0 12 0 0 12 0 0	50 0 0 12 0 0 12 0 0	100 0 0 70 11 7 109 8 0	100 0 0 70 11 7 34 19 2	100 0 0 82 2 6 34 16 1
6. Miscellaneous or Special Expen- ses, Instruments and Appli- ances, Railway Fares, &c.	17 18 9	19 18 3	22 4 8	6 7 6	7 15 3	7 11 4	1 0 9	0 10 11	1 12 0	12 4 11	4 8 9	9 13 11	1 15 0	0 12 3	0 5 3
	1,847 4 3	1,518 10 4	1,288 12 5	181 7 6	190 15 3	190 11 4	687 11 0	507 13 8	238 14 8	174 4 11	66 8 9	71 13 11	321 13 0	256 15 0	386 12 11

* Includes treatment of cases admitted under Part II of the Act.

Continued.

SERVICE.	PORT ELIZABETH.			UITENHAGE.			† UMTATA.			ALL DISTRICTS.		
	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.	1903.	1904.	1905.
1. Cost of Buildings, Construction and Repairs	£ s. d. 6 13 0	£ s. d. 3 10 0	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. ...	£ s. d. 161 10 10	£ s. d. 232 7 4	£ s. d. 125 12 2
2. Cost of Furniture, Utensils and Fittings	20 6 0	19 16 10	10 7 11	...	...	...	...	...	...	24 10 6	31 4 4	10 7 11
3. Cost of Bedding and Clothing	47 9 1½	61 17 6	81 18 5	...	...	...	...	...	...	75 9 7½	122 19 9	136 1 1
4. Cost of Provisions, Medical Comforts, Fuel, Light, Soap, Lime, and other supplies or services	340 12 4½	304 0 2	371 3 0	...	...	...	50 0 0	72 0 0	72 0 0	1,246 7 3½	1,094 18 7	1,108 3 11
5. Salaries and Allowances :— Medical Inspector ... Lay Assistant ... Matron, Nurses, Attendants, Guards, &c.	218 5 0 112 0 0 84 13 7	218 5 0 136 0 0 84 13 7	100 0 0 136 0 0 84 13 7	75 0 0 ...	75 0 0 ...	...	50 0 0 ...	50 0 0 ...	50 0 0	1,257 16 4 504 0 0 732 1 7	932 9 7 605 1 4 687 3 1	581 5 0 643 5 9 532 8 6
6. Miscellaneous or Special Expenses, Instruments and Appliances, Railway Fares, &c.	32 2 0	35 16 6	30 0 0	2 9 9	2 8 11	2 13 0	...	...	...	73 18 8	71 10 10	74 0 2
	862 1 1	863 19 7	814 2 11	101 13 1	101 12 3	26 16 4	272 0 0	194 0 0	194 0 0	4,075 14 10	3,777 14 10	3,211 4 6

† Part I of "The Contagious Diseases Prevention Act, 1885," came into force in the District of Umtata on the 29th March, 1904.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "F."

REPORTS ON THE N'DABENI AND NEW BRIGHTON NATIVE RESERVE LOCATIONS.

1. N'DABENI NATIVE RESERVE LOCATION.

Dr. J. H. ELMES, Resident Medical Officer.

(a) REPORT FOR THE YEAR 1904.

1. Site, Area, Soil, Population.—The half-year ended 30th June, 1904, has already been reported on, and no alterations or additions to the Location were made during the second half of the year under consideration.

The average population for the year was, inclusive of 56 Europeans, 4,021. The Native population consisted of approximately 50 per cent. Mxosa, 30 per cent. Fingo, 10 per cent. Basuto, 5 per cent. Bechuana, and 5 per cent. Zulu.

2. Sanitation, Dwellings and Accommodation.—No alterations or additions have been recently made. There is no overcrowding, and the Location generally is clean.

The water-supply is from reservoirs and local bore-holes, good in quality and sufficient in quantity. The same difficulties exist with respect to storm-water drainage, the drains becoming constantly choked with drift sand.

Sanitary Staff.—This was considerably reduced during the year, and now consists of one Sanitary Inspector, eleven labourers and others, including drivers.

The sanitary conveniences are suitable and adequate, the conversion of the Simpson latrines to a more suitable pattern having been completed. The system of sanitary removals remains the same.

No additions or alterations were made to the wash or ablution houses.

The sanitary work of the Location is done departmentally, and has been found uniformly satisfactory.

3. Health of Residents.—During the year there were 4,505 attendances on out-patients, including 2,361 prescriptions dispensed, 1,296 dressings supplied, 838 visits to patients in their own homes, and 10 midwifery cases. The medical cases

Infectious Diseases.—No cases of Small-pox, or diseases resembling Small-pox, Scarlet Fever, Diphtheria, Plague or Erysipelas occurred during the year.

An isolation ward was constructed at the rear of the Hospital buildings.

Matters beyond Location affecting Health of Residents.—The two encampments of storekeepers outside the main gates are now being looked after by the adjoining Municipality, but great difficulty is experienced in getting the inhabitants to observe the ordinary principles of sanitation.

Disinfection.—On each Friday, clothing, bedding, etc., for disinfection, is sent to the steam disinfector at the Eviction Camp.

Deaths and Death-Rate.—Eighty-five deaths were registered, being a death-rate of 21.11 per 1,000 per annum.

Births and Birth-Rate.—Eighty-eight births were recorded, being a birth-rate consisted principally of Bronchitis, Dysentery, and Diarrhœa Infantum. of 21.88 per 1,000 per annum.

Vaccinations.—729 adults and 23 children underwent vaccination or re-vaccination. The vaccinations of children were all subsequently examined and

found successful; the adults I am unable to report on as they were all Natives leaving for their homes, and were not subsequently examined. There were no inoculations with Haffkinine.

Location Hospital Site, etc.—No alterations were made, with the exception of the addition of the isolation ward and storeroom. The general sanitary arrangements are unchanged. The arrangements regarding administration, and organisation, staff, supplies, furniture and equipment, etc., remain as before, and proved satisfactory.

In-Patients.—There were four patients remaining on 1st January, 1904, and 118 admissions during the year, the total treated in the Wards being 122.

Diseases.—Tuberculosis, 21; Pneumonia, 11; Enteric, 13; Abscess, 9; Bronchitis, 9; Burns, 4; Pleurisy, 2; Enteritis, 5; Fractures, 6; Wounds, 10; Meningitis, 1; Tonsillitis, 2; Cardiac Disease, 4; Hemiplegia, 2; Rupture of Urethra, 1; Hepatic Cyst, 1; Dysentery, 4; Febricula, 3; Sprains, 2; Epilepsy, 2; Rheumatism, 1; Bright's Disease, 1; Cellulitis, 1; Cerebral Concussion, 2; Scurvy, 3; Chicken-pox, 1; For Observation, 1. Total, 122.

The average stay of patients was 43·4 days. Outpatients attend daily at 9 a.m.; those who are unable to attend the Hospital are visited in their own homes.

Midwifery Cases.—Ten of these cases were attended by the Medical Officer. They were, in the majority, cases of retained placenta.

The Natives usually do their own nursing, and no cases of Puerperal Fever occurred.

Mortuary and *Post-mortem* Examinations.—A *post-mortem* examination is performed on each patient dying in the Hospital, the results being recorded in a prescribed book.

General Remarks, etc.—I have nothing to add to my previous remarks under this heading.

Inquests into local casualties are now held locally.

(b) REPORT FOR THE YEAR 1905.

1. Site, Area, Soil, Population.—No alterations or additions were made during the year 1905.

The average population was 2,890, of which 44 were Europeans.

The Native population consisted of 50 per cent. Mxosa, 30 per cent. Fingo, 10 per cent. Basuto, 5 per cent. Bechuana, and 5 per cent. Zulu.

2. Sanitation, Dwellings and Accommodation.—No alterations or additions were made; there is ample accommodation for a much larger population.

The water-supply is derived from the same sources as formerly.

The difficulties regarding drains and the disposal of slop-water still exist, the drains being choked with drift sand during the summer, and large quantities of surface water not running off freely during the rains.

No receptacles for slop-water have yet been provided, the result being that the Natives throw their slops into the open drains, and in many cases on to the surface outside their huts.

Sanitary Staff.—No changes have been made of late. The sanitary conveniences and system of removals are the same, and are satisfactory.

3. Health of Residents.—The number of attendances on out-patients was 4,206, including dressings, etc.

Six cases of Enteric Fever and thirty cases of Tubercular Diseases occurred during the year.

Matters beyond the Location affecting Health of Residents.—I have little to add to my former reports on this subject.

The encampments of storekeepers outside the Location gates still exist, and are still filthy. They are prolific nuclei of drink and crime.

They are prolific nuclei of drink and crime.

Disinfection.—Clothing, bedding, etc., is now disinfected locally. The steam disinfectant is available for use in cases where considered necessary.

Deaths and Death-Rate.—48 Deaths occurred, being a death-rate of 16·6 per 1,000 per annum.

Births and Birth-Rate.—74 Births were registered, being a birth-rate of 25·6 per 1,000 per annum.

Vaccinations.—2,959 Persons were vaccinated during the year.

Location Hospital.—No alterations were made during the year.

Mortuary and *Post-mortem* Examinations.—Nineteen *post-mortem* examinations were performed during the year.

2. NEW BRIGHTON NATIVE RESERVE LOCATION.

Dr. A. B. SIGISMOND POWELL, Resident Medical Officer.

(a) REPORT FOR THE YEAR 1904.

Population.—During the year ended 31st December, 1904, 2,732 Natives were admitted to the Location, and 3,446 departed to their own homes. The average monthly population was 2,028, and the total population remaining in the Location at the end of the year was 1,411. This decrease in numbers is mainly due to the existence of outside Locations.

Births.—68 Births were registered during the twelve months under review.

Deaths.—During the same period 48 deaths occurred, giving a death-rate of 23·7 per 1,000 on the average monthly population.

The certified causes of death were as follows:—Acute Capillary Bronchitis, 3; Asthenia, 6; Bronchitis, 1; Broncho-Pneumonia, 7; Cancer of Stomach, 1; Congenital Syphilis, 2; Dysenteric Diarrhœa, 5; Epilepsy, 1; Exhaustion from Burning, 1; Exhaustion from Scalding, 1; Exhaustion from Prolonged Labour, 1; Plague, 1; Pneumonia, 2; Phthisis Pulmonalis, 12; Secondary Hæmorrhage from Popliteal Aneurism, 1; Teething, 2; Typhoid, 1.

Inquests were held in four cases.

The Temporary Hospital, opened in March, continues to be the only Hospital accommodation available in the Location, and the practice of sending the more serious cases to the Provincial Hospital is still carried out.

Fourteen patients were admitted to the Location Hospital with the following results:—

Discharged recovered	7
Died	5
Transferred	0
Remaining in Hospital on 31st December, 1904	2
	—
	14
	—

The number of attendances upon out-patients was 1,986, and the number of visits paid to patients in their own homes was 960.

Four isolated cases of Bubonic or Oriental Plague were reported. One of these proved fatal before removal, while the others made good recoveries in the Lazaretto. Infection, in every case, was directly traceable to Plague-infected premises in Port Elizabeth.

One case of Measles, and one case of Typhoid also occurred, as well as a number of cases of Tuberculosis. In the cases of the latter where death occurs, a process of disinfection of the dwelling, clothing and bedding by “Cyllin” is carried out.

No Small-pox occurred.

Sanitation.—A Sanitary Inspector, who combines his duties with those of Clerk of Works, was appointed during the year, and assumed duty on the 1st July, 1904. This appointment has in every way proved a great advantage to the Location.

(b) REPORT FOR THE YEAR 1905.

Site.—The location is situated five miles from Port Elizabeth, facing South-East.

Soil.—Vegetable, overlaying shaly gravel.

Area.—Twenty-seven acres, enclosed by a fence, but there is ample allowance for expansion in any direction.

Population.—There was a large increase in population during 1905, which is partly attributable to the enforcement of the Location Acts in Port Elizabeth. The average population during the twelve months covered by this report was 3,662, the proportion of males to females being about 6 to 1, and the proportion of adults to minors about 3 to 1, respectively.

Race.—Kaffirs for the most part, with Fingos, Basutos, Hottentots and some Zulus.

Climatic Conditions.—The South-easter is the prevalent wind. There were some very heavy rain storms towards the end of the year, which was cooler than usual.

2. Sanitation.—Dwellings and accommodation.—No new dwellings were added during the year, and no alterations were carried out to the old ones, with the exception of “wind shields” to the Class “C” dwellings, to be utilized as cooking places, the common kitchens having proved unsatisfactory. A new Lock-up and Gaoler’s Quarters was added which contains adequate accommodation for male and female prisoners. It is capable of enlargement in an easy manner, is of wood and iron, and brick-lined. The location was very full at times; no overcrowding occurred, although at one time it became necessary to temporarily accommodate new-comers in tents.

Water continues to be obtained from Van Staaden’s Reservoir; the quantity and quality remain the same. About 2,000 gallons are consumed per diem.

With the exception of some trenches at the lower part of the location no special provision exists for stormwater, beyond the natural fall of the ground (about 1 in 7 inches).

Sanitary Staff.—A Sanitary Inspector has been appointed, who combines his duties with those of Clerk of Works. His Staff originally consisted of three scavengers, a herd and a lamplighter. The scavengers have now been dispensed with, and this service is carried out by the Sanitary Contractor, whose equipment is small, and requisitioned for through the Magistrate.

The sanitary conveniences and accommodation remain the same as previously reported, with the exception that corner urinals are replacing the former zinc troughs in the male latrines. These empty themselves into buckets which are easily removed, and obviate the former difficulty experienced in dealing with a sunk urine tank.

The sanitary removals continue to be carried out by contract.

There are no wash-houses in the location, and the washing of clothes continues to be carried out either in the ablution sheds or on the veld. This is not very satisfactory.

The Ablution Sheds remain the same, but No. III. is now being drained directly into the veld in a satisfactory manner.

The location as a whole has been kept fairly clean during the year. The uncut veld in the streets and between the dwellings is, of course, a great handicap.

3. Health of Residents.—This has been good during the year.

Infectious Diseases.—No cases of Small-pox occurred.

One case of Scarlet Fever was reported, and also one case of Plague. The latter was removed to the Lazaretto and recovered, while the case of Scarlet Fever, which was treated at home, also recovered.

There are no means of isolation at our disposal with the exception of tents. A Thresh’s Disinfector has now been supplied.

Eighteen fresh cases of Tuberculosis and two of Leprosy occurred during the year. Of the latter, one was isolated in a tent and subsequently removed to Robben Island, while the other is being kept under observation at home pending arrangements for removal being completed.

Very few cases of Venereal disease came under treatment during the year.

One case of Puerperal Septicæmia is at present in the hospital. The septic condition is relieved, but there are signs of Tubercular mischief in the lungs. Towards the end of the year there was a considerable amount of Diarrhœa and allied diseases among children.

Condition of Neighbourhood.—This has considerably improved lately, the improvement being due to the cleansing of Korsten by the Plague Authorities, and also to the diminution of the population in Dassie Kraal by the enforcement of the Location Acts. The majority of residents in New Brighton are employed either at domestic occupations in Port Elizabeth, or by the Harbour Board or Railway Department. There are no special diseases due to occupation here.

Disinfection has up till recently been carried out by the Local Authority. The addition of a Thresh’s Disinfector and disinfecting appliances now renders it possible for disinfection to be carried out in the location.

There were 103 deaths during the year, giving a death-rate of 28·1 per 1,000. 127 births were reported, giving a birth-rate of 34·7 per 1,000.

Eighty-five vaccinations were performed, some considerable difficulty, however, being experienced in getting infants vaccinated.

No inoculations with Haffkine were performed.

The Location Hospital remains unchanged since last report, except for the addition of a Mortuary in the shed opposite the Hospital, the remainder of shed being utilised as a drying shed and store for the disinfector.

The administration, organisation and staff remain the same except for the fact that all dispensing of drugs, etc., is done in the Hospital. Requisitions for drugs are sent through the Medical Officer of Health for the Colony. During the part of the year the Medical Officer resided in Port Elizabeth, but has since returned to the location.

In-patients.—29 in-patients, suffering from the following diseases, were treated during the year:—

Tuberculosis, 7; Leprosy, 1; Senile Decay, 1; Paraplegia, 1; Ainum, 1; Mania, 1; Observation, 1; Cerebral Hæmorrhage, 1; Bronchitis, 2; Gangrene of Lung, 1; Cirrhosis of Liver, 2; Periostitis, 1; Fractures, 2; Contusions (including cut heads), 5; Puerperal Septicæmia, 1; Epilepsy, 1.

Of these 9 died, 16 were discharged and 4 remained under treatment.

An interesting case of Ainum was admitted, and one toe amputated. The case was that of a woman who had always lived in Cradock.

A boy suffering from a tubercular affection of the spinal cord, which presented some unusual features, was treated. The patient had well-marked paraplegia when first seen, but was lost sight of for some time and on re-appearance exhibited a very large bed sore through which the head, neck and great trochanter of his left femur protruded, the bone being white and polished. No physical signs existing in the lungs a transfexion through the hip joint was done, the patient making an excellent recovery and returning to his home in Kaffirland.

Out-patients.—2,734 patients were seen in the out-patient department, and 1,286 visits were paid to patients in their own homes.

Midwifery Cases.—Fifteen cases were attended. In each of these cases some complication had arisen which made medical attendance desirable. The majority of Natives when being confined do not send for a doctor.

Post-mortems.—Eleven inquests were held.

General Remarks and Recommendations.—A more complete supply of Surgical Instruments is urgently required in the location, on account of the increase of population. Also authority for the expenditure of small sums of money in cases of urgency should be granted.

TABLE I.

Return of Populations, Births, and Deaths at the N'dabeni and New Brighton Native Reserve Locations during the years ended 31st December, 1904 and 1905:—

N'DABENI NATIVE LOCATION.

	Average Population.		Number of Births.		Birth-Rate per 1,000 per annum.		Number of Deaths.		Death-Rate per 1,000 per annum.	
	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.
Registered Residents ...	3,965	2,846	88	74	22·19	26·00	84	48	21·18	16·86
Others	56	44	...	...	...	...	1	...	17·86	...
Total	4,021	2,890	88	74	21·88	25·60	85	48	21·11	16·61

NEW BRIGHTON NATIVE LOCATION.

Registered Residents ..	2,005	3,639	68	127	33·9	34·9	48	103	23·9	28·3
Others	23	23	...	...	...	...	...	...	...	...
Total	2,028	3,662	68	127	33·5	34·7	48	103	23·7	28·1

TABLE II.

Return of causes of death of persons dying in N'dabeni and New Brighton Native Reserve Locations during the years ended 31st December, 1904 and 1905.

DISEASE.	N'dabeni Native Location.						New Brighton Native Location.					
	Registered Residents.		Others.		Total.		Registered Residents.		Others.		Total.	
	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.
Asthenia	6	5	...	...	6	5	6	15	...	...	6	15
Cancer ... ..	...	...	...	...	...	...	1	...	...	...	1	...
Childbirth ... ..	...	...	...	...	...	...	1	1	...	...	1	1
Cardiac Failure	1	...	...	...	1	...	...	2	...	...	...	2
Dentition	5	6	1	...	6	6	2	3	...	...	2	3
Enteric Fever	4	...	...	...	4	...	1	...	...	...	1	...
Epilepsy ... ..	...	...	...	...	...	...	1	...	...	...	1	...
Gastro-Enteritis	18	7	...	...	18	7	5	7	...	...	5	7
Diseases of the Heart and Circulation	2	1	...	...	2	1	...	5	...	...	...	5
Hæmorrhage ... ..	...	1	...	...	...	1	1	...	...	...	1	...
Intestinal Obstruction ... ..	...	2	...	...	...	2	...	...	...	...	...	...
Infantile Paralysis ... ..	...	...	...	...	...	...	...	1	...	...	...	1
Diseases of the Kidney ... ..	...	...	...	...	...	...	...	2	...	...	...	2
Diseases of the Liver... ..	1	...	...	...	1	...	...	2	...	...	...	2
Meningitis	1	1	...	...	1	1	...	1	...	...	...	1
Pulmonary Diseases	24	4	...	...	24	4	13	29	...	...	13	29
Diseases of the Pulera	1	1	...	...	1	1	...	1	...	...	...	1
Plague ... ..	...	...	...	...	...	...	1	...	...	...	1	...
Rheumatism ... ..	...	...	...	...	...	...	...	1	...	...	...	1
Scalding and Burns ... ..	...	1	...	...	...	1	2	...	...	...	2	...
Senility ... ..	...	1	...	...	...	1	...	1	...	...	...	1
Syphilis ... ..	...	...	...	...	...	...	2	...	...	...	2	...
Tuberculosis	21	18	...	...	21	18	12	32	...	...	12	32
Total	84	48	1	...	85	48	48	103	...	...	48	103

TABLE III.

Return of Cases of Infectious and Contagious Diseases occurring in the N'dabeni and New Brighton Native Reserve Locations during the Years ended 31st December, 1904 and 1905.

N'DABENI NATIVE LOCATION.

	Registered Residents.				Other ^s .				Total Cases.	
	1904.		1905.		1904.		1905.			
	M.	F.	M.	F.	M.	F.	M.	F.	1904.	1905.
Enteric Fever	12	1	5	1	...	...	...	...	13	6
Chicken Pox	1	...	...	...	...	...	...	...	1	...
Tubercular Diseases :										
Phthisis Pulmonalis	30	5	26	3	...	...	...	...	35	29
Other Tubercular Diseases	3	1	1	...	...	...	...	...	4	1
Syphilis	3	...	...	...	...	...	...	...	3	...
Gonorrhœa	10	...	10	...	...	...	...	...	10	10
Total	59	7	42	4	...	...	...	...	66	46

NEW BRIGHTON NATIVE LOCATION.

Enteric Fever	1	...	...	...	...	...	...	...	1	...
Scarlet Fever ... ..	...	...	1	...	...	...	...	...	...	1
Measles ... ..	...	1	...	...	...	...	...	...	1	...
Puerperal Fever ... ..	...	...	...	1	...	...	...	...	...	1
Tubercular Diseases :										
Phthisis Pulmonalis	8	4	13	5	...	...	...	...	12	18
Other Tubercular Diseases	1	...	1	...	...	...	...	...	1	1
Plague	4	...	1	...	...	...	...	...	4	1
Leprosy ... ..	...	...	1	1	...	...	...	...	...	2
Syphilis	2	...	1	3	...	...	...	...	2	4
Gonorrhœa ... ..	...	...	6	...	...	...	...	...	...	6
Total	16	5	24	10	...	...	...	...	21	34

TABLE IV.

RETURN of In-Patients treated in the N'dabeni and New Brighton Native Reserve Locations during the Years ended 31st December, 1904 and 1905.

N'DABENI NATIVE LOCATION.

	Registered Residents.				Others.				Total.	
	1904.		1905.		1904.		1905.		1904.	1905.
	M.	F.	M.	F.	M.	F.	M.	F.		
No. of beds provided	15	5	15	5	...	...	...	...	20	20
Remaining in Hospital at beginning of year	4	...	6	...	...	...	...	...	4	6
Classification of Patients admitted :—										
Surgical	28	3	10	1	...	2	...	...	33	11
Ordinary Medical Cases	49	5	36	2	1	1	1	...	56	39
Cases of Enteric Fever	12	1	3	1	...	...	...	...	13	4
Cases of other Infectious Diseases ..	15	1	19	2	...	...	...	...	16	21
Venereal Cases ... ..	...	...	...	...	...	...	...	...	...	...
Average Daily No. of Patients in Hospital	4.2	0.3	3.56	0.117	0.6	0.5	0.09	...	5.6	3.77
Average Stay of Patients :—										
Discharged— Days	20.27	10.25	17.7	5.3	116.00	...	3	...	48.84	8.6
Died — „	13.77	125.00	13.06	9.3	...	22.33	...	...	53.7	11.18
Remaining— „	27.55	...	18.00	...	...	...	...	...	27.55	18.00
Operations :—										
With General Anæsthetic ... ..	...	...	...	...	...	...	...	...	...	...
Without General Anæsthetic	2	...	3	1	...	1	...	...	3	4
Deaths :—										
Surgical Cases	2	1	...	1	...	2	...	...	5	1
Ordinary Medical Cases	20	...	7	...	...	1	...	...	21	7
Cases of Enteric Fever	3	...	...	...	...	...	...	...	3	...
Cases of other Infectious Diseases...	4	...	10	2	...	...	...	...	4	12
Venereal Cases ... ..	...	...	...	...	...	...	...	...	...	...
Total	29	1	17	3	...	3	...	...	33	20
Average Total Death Rate per cent...	25.9	10.0	23.0	50.00	...	100.0	...	...	26.2	24.7
Remaining in Hospital at end of Year :										
Surgical Cases	1	...	...	...	...	...	...	...	1	...
Ordinary Medical Cases	2	...	2	...	...	...	...	...	2	2
Cases of Enteric Fever	2	...	...	...	...	...	...	...	2	...
Cases of other Infectious Diseases...	1	...	...	...	...	...	...	...	1	...
Venereal Cases ... ..	...	...	...	...	...	...	...	...	...	...
Total	6	...	2	...	...	...	...	...	6	2

NEW BRIGHTON NATIVE LOCATION.

No. of Beds provided	2	2	2	2	...	...	...	...	4	4
Remaining in Hospital at beginning of Year ... ..	...	...	1	1	...	...	...	...	...	2
Classification of Patients admitted :—										
Surgical	4	1	6	3	...	...	...	...	5	9
Ordinary Medical Cases	5	4	4	6	...	...	...	...	9	10
Cases of Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	...
Cases of other Infectious Diseases...	...	...	8	...	...	...	...	...	...	8
Venereal Cases ... ..	...	...	...	...	...	...	...	...	...	...
Average daily No. of Patients in Hospital	0.02	0.01	1.11	0.55	...	...	...	...	0.03	1.66
Average Stay of Patients :—										
Discharged— Days	11	13	42	3	...	...	...	...	12.0	22.5
Died — „	20	9	5	20	...	...	...	...	14.5	12.5
Remaining— „	148	1	10	4	...	...	...	...	74.5	7.0
Operations :										
With General Anæsthetic ... ..	...	...	3	2	...	...	...	...	...	5
Without General Anæsthetic	4	1	3	1	...	...	...	...	5	4
Deaths :—										
Surgical Cases	1	...	...	...	...	...	...	...	1	...
Ordinary Medical Cases	3	1	...	3	...	...	...	...	4	3
Cases of Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	...
Cases of other Infectious Diseases...	...	...	6	...	...	...	...	...	...	6
Venereal Cases ... ..	...	...	...	...	...	...	...	...	...	...
Total	4	1	6	3	...	...	...	...	5	9
Average Total Death Rate per cent...	44.4	20.0	31.6	30.0	...	...	...	...	35.71	31.0
Remaining in Hospital at end of Year :										
Surgical Cases ... ..	...	1	...	...	...	...	...	...	1	...
Ordinary Medical Cases	1	...	1	1	...	...	...	...	1	2
Cases of Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	...
Cases of other Infectious Diseases...	...	...	2	...	...	...	...	...	...	2
Venereal Cases ... ..	...	...	...	...	...	...	...	...	...	...
Total	1	1	3	1	...	...	...	...	2	4

TABLE V.

Return of Out-Patients and General Medical Work in the N'dabeni and New Brighton Native Reserve Locations during the years ended 31st December, 1904 and 1905.

N'DABENI NATIVE LOCATION.

	No. of Attendances on Out-Patients		No. of Visits to Patients in their own homes in Location, exclusive of Mid-wifery cases.		No. of Mid-wifery cases attended.		No. of Prescriptions Dispensed.		No. of Dressings Supplied.	
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905
Registered Residents.	4,447	4,102	838	459	10	7	2,361	2,329	1,238	1,307
Others	58	104	...	...	...	2	...	60	58	42
Total	4,505	4,206	838	459	10	9	2,361	2,389	1,296	1,349

NEW BRIGHTON NATIVE LOCATION.

Registered Residents	1,941	2,669	910	1,265	19	15	2,233	1,963	269	706
Others	45	65	50	21	...	...	20	42	25	23
Total	1,986	2,734	960	1,286	19	15	2,253	2,005	294	729

Report of the Medical Officer of Health for the Colony.

PART II.

Reports of District Surgeons upon Public Health and Sanitation.

Colonial Secretary's Office,
Cape Town, Cape of Good Hope,
19th December, 1905.

CIRCULAR LETTER No. 67 OF 1905.

ANNUAL HEALTH REPORTS FOR 1904 AND 1905 FROM DISTRICT SURGEONS AND ADDITIONAL DISTRICT SURGEONS.

SIR,

With reference to the preparation of the Annual Health Reports for the year ending on the 31st instant, I am directed by the Colonial Secretary to inform you that Parliament having resolved that the period to be covered by the Annual Reports shall revert to the Calendar year instead of the Financial year, it will now be necessary, in order that there may be no break in the continuity of the Public Records, that, for the calendar year 1904—only the first half of which has at present been dealt with—complete Reports on the Public Health, with all attendant statistical information, shall be furnished by District Surgeons and others at the same time that they are rendering their Reports for the calendar year 1905, now drawing to a close, so that the Report of the Medical Officer of Health for the Colony on the Public Health, for presentation to Parliament, may cover the whole of the two calendar years, 1904 and 1905.

I am accordingly to request you to be good enough to call upon the District Surgeon and the Additional District Surgeon (if any) to furnish as soon as possible his Reports and Returns on the state of the Public Health and sanitation in his District during the two calendar years 1904 and 1905.

The Reports should deal with the general health and sanitation of the District, and should furnish special descriptions of any considerable outbreak of infectious disease which has taken place during the period under review, and the Returns should supply information on the special subject of Small-pox, Vaccination, the working of "The Contagious Diseases Act, 1885," Leprosy, and of persons in receipt of pauper relief from the Government.

Unless the conditions prevailing during each of the two years have been markedly different, the whole period may be dealt with in one Report, but in that case the year of occurrence of any important event should be clearly indicated in the Report. In every case, however, the statistical information given in the Returns must be rendered separately for each Calendar year.

The Reports should be drawn up under the several headings, and in the order indicated below, so as to enable combination and comparison with other districts and with previous years to be made, but this should not prevent the District Surgeon dealing as fully as he may deem necessary with any matter which he considers deserving of special attention.

Should the District Surgeon not have at his disposal the information necessary to enable him to deal properly with a subject under any of the headings, and if you can ascertain the required particulars by correspondence with local or other authorities, or can in any other way assist him, I am to request that you will do so. In every case in which no information can be supplied under a heading, sub-heading or return, "nil" should be written against it.

The object aimed at in asking for these Reports is to obtain, as far as possible, a complete, comprehensive and connected history of the health and sanitary condition of the Colony as a whole in regard to each year under consideration, as well as to procure information particular to each district, especially in respect of any deficiency in sanitary control, or the existence of conditions inimical to health.

[G. 39—1906.]

B

The following are the matters which, *inter alia*, the District Surgeon should treat of, and in reporting on any sanitary defects that exist and their remedy, he should state the length of time they have continued and the steps, if any, taken by the Local Authority concerned to remove them. Where no alterations have taken place since the last Report, it will be sufficient if this is stated in each case:—

- (a) The condition of the water supplies, especially as regards their purity both at source and on delivery, their sufficiency, the existence of any causes likely to lead to pollution, either at source or during storage or delivery, and the steps which should be taken for bringing about improvement.
- (b) Sewerage and drainage.
- (c) The collection and disposal of night soil, slop-water, and household and other refuse.
- (d) Overcrowded dwellings and dwellings unfit for human habitation.
- (e) The management of slaughter-houses, butcheries, bakeries, dairies, and other trades affecting health.
- (f) The sale, storage and preparation of human food.
- (g) The keeping of cattle, swine, and other animals.
- (h) The order, cleanliness, and general sanitation of any Native Location or Camp of Natives under the control of any Local or other Authority within the district.
- (i) Cemeteries and burial grounds.
- (k) The abatement of nuisances generally.
- (l) What hospital accommodation exists in the district for the isolation and treatment of cases of infectious disease, its nature, extent, and to what local authority it belongs.
- (m) The presence or spread of infectious disease, especially Enteric Fever, Diphtheria and Small-pox. The account of any outbreak of disease that has occurred in your district during the period under report should include information as to its situation; dates of its discovery and commencement, and of the discovery and discharge of the last case; source of infection and how conveyed; number of persons attacked, with the number of deaths (distinguishing as far as possible between European and Coloured, adults and children), and the steps taken, with their effect, to suppress the disease, the isolation of the sick, the surveillance of those exposed to the infection, and under whose authority the steps were taken, *i.e.*, the Divisional Council, Municipality, Village Board, Resident Magistrate, Special Justice of the Peace, or by any of these combined, and in this connection it should be particularly stated whether the "Local Authority" has, in the District Surgeon's opinion, done all things necessary or possible for preventing or suppressing such outbreaks, and if not, in what respect omissions have occurred.

In view of the extreme prevalence of Measles in many parts of the Colony, special information should be given regarding any outbreak of this disease that may have occurred in your District, and its effect on the general mortality—especially among children—should be discussed.

With regard to outbreaks of Small-pox, the cases should be classified into *pre-vaccinated* and *unvaccinated*, with the number of deaths in each class. Where vaccinated cases have occurred it should be stated whether the operation was done *prior* to the exposure to infection or not, and also, if possible, the degree of success accompanying the operation. Information should also be furnished as to the steps taken for carrying out vaccination and re-vaccination, with their effect on the outbreak.

With regard to vaccination, it is particularly requested that the fullest account of the amount of success that has been obtained in the performance of the operation should be given.

The total cost *incurred* in dealing with any outbreak of Small-pox should be given, distinguishing between that incurred directly by the Local Authority and that incurred directly by the Government.

Also in the case of outbreaks of Enteric Fever the probable cause of the outbreak, especially with reference to contaminated water, milk or food supplies, should be discussed.

With regard to outbreaks of Bubonic Plague, information concerning these is furnished to the Government through special channels, but I shall, nevertheless, be glad if you will supply information on the subject of the precautionary measures adopted in your district, and especially as regards the prevalence of rats and other rodents and the means adopted, and with what success, for their extermination,

Information is also desired regarding any special prevalence, with the cause, of any of the more unusual diseases, such as Scurvy, Epidemic Pneumonia, and the like.

RETURNS.—The annexed forms should be filled in *separately for each of the two years* as completely as possible:—Those marked B, D and E by the District Surgeon, with your assistance, and those marked A, C, F and G, by yourself.

You will be good enough before forwarding these Returns to cause them to be carefully audited in order to ascertain if they balance properly; that where figures are carried over from the previous year they are correct and agree with the Returns of the *preceding* year; that all the figures are correctly entered in their proper columns, and that all additions, whether up-casts or cross-casts, are accurate, inas-much as the omission of these apparently trifling precautions in regard to similar Returns in previous years has entailed a large amount of subsequent trouble on both Resident Magistrates and District Surgeons, as well as causing great delay in dealing with the Returns by this Department.

Inasmuch as the information furnished by the Registration of Births and Deaths is of paramount importance in enabling the Medical Officer of Health to arrive at reliable conclusions regarding the Public Health, and as the accuracy of these Statistics depends entirely on the completeness with which Births and Deaths are being recorded, I am directed to request you to be good enough to report whether in your opinion *all* Births, as well as Deaths, occurring in your District, are being notified to the Registering Officer in accordance with the requirements of the Law, and if not, will you kindly state exactly to what extent omissions are taking place.

The Colonial Secretary wishes me to request you to give this matter your personal attention, in order that the information furnished may be as accurate as possible, and that it may be returned to this office at the earliest possible moment, so that the Report on the Public Health of the Colony for the period referred to may not be unnecessarily delayed.

I have the honour to be,
Sir,
Your obedient Servant,

NOEL JANISCH,
Under Colonial Secretary.

To each Resident Magistrate and
Assistant Resident Magistrate.

A.—RETURN of Persons in Receipt of Pauper Relief in the District of...
.....during the Year ended 31st December, 190...

NAME OF PERSON.	Able-bodied or Infirm.	European.		Coloured.		Lepers.	Lunatic.	Syphilitic.	Ordinary.	Form of Relief.		Number of days in receipt of Relief.
		Approximate Age.								Indoor.	Out-door.	
		M.	F.	M.	F.							
Total												

.....
Resident Magistrate.

Dated at.....
.....190...

NOTE.—All Lepers, Lunatics and Syphilitics figuring on this Return should appear also on Return “G” the “Lunatic” Return and “E” respectively. If they do not, please explain to avoid querying.
N.B.—Before forwarding this Return, kindly verify all the entries therein, and ascertain that all additions, both up-casts and cross-casts, are correct, in order to avo’ d querying.

B.—RETURN of Outbreaks and Cases of Small-pox, also called Amaas, occurring in the District of.....during the Year ended 31st December, 190...

Locality of Outbreak.		Date of First Discovery.		Supposed Source of Infection and Manner of Introduction.		Total Number of Cases Discovered.								Total Number of Deaths.								Total No. of Persons (healthy) kept under Surveillance or Quarantined.		No. of Guards Employed.		State whether Outbreak still in Progress, or, if suppressed, give Date of Discharge of the Last Case.		Name of Local Authority having Charge of the Outbreak.		Remarks.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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.....
District Surgeon.

Dated at.....
.....190...

N.B.—Before forwarding this Return kindly verify all the entries therein, and ascertain that all additions, both up-casts and cross-casts, are correct, in order to avoid querying.

C.—RETURN of Expenditure incurred for the suppression of Small-pox in the District of.....during the Year ended 31st December, 190...

SERVICE.	Expenditure <u>incurred</u> from 1st January to 31st December, 190...					
	Directly by Government.			*Directly by Local Authority.		
Special Allowances or Payments to District Surgeon (Exclusive of Vaccination)						
Travelling Allowances to District Surgeon (Exclusive of Vaccination)						
Payments to Private Practitioners						
Travelling Allowances to District Surgeon, Vaccinating						
Special Allowance (if any) to District Surgeon for Vaccinating						
Payments to Lay Vaccinators						
Payments to Nurses, Guards, Police, &c.						
Cost of Provisions and Supplies						
Cost of Construction, Purchase or Rent of Hospital, Buildings, Huts, Tents, &c.... ..						
Cost of Bedding, Clothing, Furniture, Utensils and Equipment						
Cost of Medicines						
Transport of Patients, Supplies, &c						
Payments made in respect of Compensation for Infected Private Property destroyed						
Miscellaneous Expenses						
Total						

.....
Resident Magistrate.

Dated at.....
.....190...

* Including any share of expenditure that may be claimed from Government under the provisions of Act No. 23 of 1897.

D.—RETURN of Public Vaccination performed in the District of.....
during the Year ended 31st December, 190...

[illegible]

District Surgeon.

Dated at.....

.....190..

NOTE.—Also please state the number of arm to arm Vaccinations performed. Also approximately the number of Vaccinations performed by Private Practitioners in the District.

N.B.—Before forwarding this Return, kindly **VERIFY** all the entries therein, and ascertain that all additions, both up-casts and cross-casts, are correct in order to avoid querying.

E.—RETURN of Cases under Medical Treatment under Part II. of “The Contagious Diseases Prevention Act, 1885,” in the District of..... during the year ended 31st December, 190 .

[illegible]

* The name of each individual patient is to be filled in here, and the required particulars corresponding to it inserted in the proper columns opposite to it.

† The patients entered in this column should agree with those returned last year as still remaining under treatment at the conclusion of that year.

** The object in asking for this information is to ascertain as far as possible to what extent the disease is innocently acquired.

NOTE.—In filling in this return, the District Surgeon should first enter all the indoor patients and then all the outdoor patients. This will greatly facilitate the work of abstracting the return at this Office.

N.B.—Before forwarding this return kindly verify all the entries therein, and ascertain that all additions, both up casts and cross-casts, are correct, in order to avoid querying.

District Surgeon.

Dated at.....

.....190 .

F.—RETURN of EXPENDITURE incurred during the Year ended 31st December, 190 , in connection with Part II. of “The Contagious Diseases Prevention Act, 1885,” in the District of.....

SERVICE.	EXPENDITURE.		
	Incurred from 1st January to 31st Dec., 190 .		
1. District Surgeon's Expenses:—			
(a) Travelling Expenses			
(b) Fixed Commuted Allowance (if any)			
(c) Fees for Medical Attendance and Medicines			
(d) Other charges (if any)			
2. Cost of Buildings, Construction and Repairs			
3. Rent of Buildings			
4. Cost of Furniture, Utensils and Fittings			
5. Cost of Bedding and Clothing			
6. Cost of Provisions, Medical Comforts, Fuel, Light, Soap, Lime, and other Supplies or Services			
7. Salaries and Allowances of Nurses, Attendants, Guards, &c.			
8. Payments made to Managers of General Hospitals for Treatment and Maintenance of C.D. cases			
9. Miscellaneous or Special Expenses			
Total			

.....
Resident Magistrate.

Dated at.....
.....190 .

G.—RETURN of Lepers dealt with or living in the District of.....
.....during the year ended 31st December, 190 .

	Number living in the District and on the Register at conclusion of previous year.		Number of fresh cases registered during the year ended 31st Dec., 190 .		Total number of cases on the Register during the year ended 31st Dec., 190 .		Number removed from the Register during the Year ended 31st December, 190 .										Number remaining on the Register and being still in the District on the 31st Dec., 190 .	
	M.	F.	M.	F.	M.	F.	Sent to Asylum.		* Died.		* Disappeared or absconded.		* Disease arrested or in abeyance.		* Found not to be suffering from Leprosy.			
							M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
EUROPEANS.																		
Tubercular Leprosy ...																		
Anæsthetic Leprosy ...																		
Mixed Leprosy ...																		
COLOURED.																		
Tubercular Leprosy ...																		
Anæsthetic Leprosy ...																		
Mixed Leprosy ...																		
Total ...																		

NOTE.—Are there any reputed lepers in the district who are not on the Leper Register; if so, please insert particulars here :—

	Males.	Females.
Europeans		
Coloured		

Dated at.....
.....190 .

.....
Resident Magistrate.

* It is requested that all persons whose names are on the Register be kept under observation, so that any removals from these causes may be immediately entered on the Register. This is especially desirable in the case of those suspected persons, in regard to whom the District Surgeon may have become satisfied that they are not suffering from Leprosy.

N.B.—Before forwarding this Return kindly VERIFY all entries therein and ascertain that additions, both up-easts and cross-easts, are correct—in order to avoid querying.

COLONY PROPER.

1. ABERDEEN.

DR. H. C. BEDFORD, DISTRICT SURGEON.

(a) Towards the close of the year 1904, the Municipal Authorities resolved to improve the water supply. For this purpose two bore-holes were sunk near the fountain, to a depth of eighty-four feet, with the result that the supply was greatly increased. There were expectations that the supply would be further improved by getting rid of the intake dam—unfavourably referred to in my previous reports—and having the water conveyed by some other method than in open furrows. Unfortunately there was considerable friction between the Municipal Council and the Kerkraad about certain rights over the Commonage. The Council carried the case to the Supreme Court, with the result that they found that their rights did not extend beyond the Aberdeen streets, so that any prospect of the water supply being improved must be postponed indefinitely.

(b) As in former report.

(c) The tub system is being gradually introduced. The system will never become popular, unless an endeavour is made to remove the night soil in some less objectionable manner than is done at present; and the first step towards that desirable object is to get a wagon specially adapted for that purpose. The tubs also should be thoroughly cleaned and disinfected before being replaced, and not simply emptied as is done at present. It is also time that the Council made arrangements for the removal of slop water. House refuse is removed regularly in carts.

(d) As in former report.

(e) Bakeries and butcheries are carried on in a cleanly manner. Slaughtering, however, should be prohibited in town, for although the butchers try to keep their places clean, still during the summer months there is always, to some extent, an objectionable smell, and numberless flies, which are bound to be a source of annoyance to people living in the immediate neighbourhood.

(f) and (g) As in former report.

(h) The Location, after being under the supervision of the Municipality since it was originally laid out by that body in 1857, has been handed over to the Kerkraad, so that it no longer comes under the Municipal Regulations.

(i) Cemeteries are kept in a satisfactory condition.

(k) and (l) As in former reports.

(m) The number of births registered during 1904 was 335.

European.		Fingo.		Kafir.		Mixed.		Hottentot.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
94	69	3	5	26	26	34	42	20	16

The number registered during 1905 was 327.

European.		Fingo.		Kafir.		Mixed.		Hottentot.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
86	79	1	3	21	25	40	46	17	9

The number of deaths registered during the year 1904 was 148, as against 119 in the previous year, of this number 63 were Europeans and 85 Coloured. The population of the town and district was 8,353—Census 1904—which would give a mean death-rate of 17·72 per 1,000. Taking the two races separately it would give a European death-rate of 14·22 per 1,000, and Coloured of 21·67 per 1,000. There were 114 deaths registered during 1905, of these 40 were Europeans and 74 Coloured. Taking the population as above it would give a mean death-rate of 13·65 per 1,000,

the European death-rate being only 9·03 per 1,000 and the Coloured 18·87 per 1,000.

Fifteen cases of infectious disease were notified in the town during each of the years, under the Public Health Act, viz.: Typhoid Fever, 7 (1904), 10 (1905); Diphtheria and Membranous Croup, 5 (1904), 2 (1905); and Scarlatina, 3 (1904), 3 (1905). The chief causes of death during 1904 were diseases of the Respiratory and Alimentary system. From Diarrhœa and Enteritis there have been 24 deaths (13 E. and 11 C); from Pneumonia and Bronchitis, 15 (E. 6, C. 9); from Consumption, 12 (E. 3, C. 9); from Whooping Cough, 10 (E. 4, C. 6); from Convulsions, 15 (E. 4, C. 11). There was one death due to Typhoid Fever and one to Diphtheria, 10 deaths were the result of accident and violence (E. 1, C. 9). During the year 1905, from Diarrhœa and Enteritis there have been 8 deaths (E. 2, C. 6); from Bronchitis and Pneumonia, 15 (E. 2, C. 13); from Consumption, 7 (E. 1, C. 6). Five deaths were said to be due to Typhoid Fever (E. 2, C. 3), and 4 to Croup and Membranous Croup (E. 3, C. 1). Accidents were responsible for 8 deaths (E. 3, C. 5.).

There were no cases of Small-pox. Measles made its appearance in the district towards the close of the year.

As regards vaccination very little was done during the year 1904, but in 1905 I vaccinated 383 people in the town. During the last quarter of the year a lay vaccinator was appointed to make a farm-to-farm visitation, and at its close he had vaccinated 624 people, of which number 77 were Europeans. It is impossible to state what number were successful or not.

2. ADELAIDE.

DR. WILLIAM DAVIDSON, DISTRICT SURGEON.

(a) Up to the end of 1904 there was no water supply for the village, the inhabitants depending for their water on the rainfall which was conserved in tanks. About the end of 1904 the Adelaide water scheme was completed, and since then water has been brought into town in pipes from the Koonap River, a distance of about six miles. Up to the present the water scheme has not turned out to be an unqualified success. The floods in September and October, 1905, so destroyed the filter-bed that it is now useless, consequently the water comes into town in an unfiltered condition and could scarcely be used with safety for domestic purposes unless it were previously boiled. The Municipality has no control of the river above the source of the water supply, hence nothing is done to prevent pollution of the river higher up.

(b) No drainage system exists. Cesspools receive and conserve excrement and sewerage, and when these cesspools are full they are in most cases filled in and fresh ones made.

(c) Night soil and slop water are in most cases thrown into the cesspools, and household and other refuse are in most cases thrown into a heap in a corner of the yard, and when this accumulates it is then taken out of the village and deposited at a place set apart for that purpose.

(d) There are no dwellings either overcrowded or unfit for human habitation.

(e) The slaughter-houses are out of town and can in no way affect the health of the place; the butcheries, bakeries and dairies are conducted in a proper manner, and the milk supply comes from the neighbouring farms.

(f) The sale, storage and preparation of human food are conducted in a proper manner.

(g) Very few cattle or swine are now kept in the village, and those kept do not affect the health of the community.

(h) The Native Location is kept clean and in good order.

(i) The cemeteries are outside the village, and can in no way affect it.

(k) The Local Authority has seen that yards are kept clear of refuse.

(l) There is no hospital accommodation in the district.

(m) During 1904 and 1905 the town and district has been free from Small-pox. During the earlier months of 1904 Enteric Fever was prevalent in the Native location, and a few isolated cases occurred amongst Europeans in the village, and from August to October of the same year Scarlet Fever was prevalent in the village, and this was followed by an outbreak of Diphtheria during the months of November and December. In 1905, during the month of April, Diphtheria again broke out, but only appeared in isolated cases, and from then on to December the town and district were free from infectious disease. During December, 1905, a few cases of Enteric Fever again broke out.

3. ALBANY.

DR. J. B. GREATHEAD, DISTRICT SURGEON.

(a) The water-supply is pure at source and at delivery, and is ample for the present needs of Grahamstown. As yet no filter beds have been provided. Since my last report an additional reservoir has been completed at Slaai Kraal, immediately above the Milner Reservoir, with a capacity for 150,000,000 gallons. The total capacity for water storage is now 227,000,000 gallons, the quantity of water being dependent mainly upon the rainfall.

(b) There is no system of sewerage. The town is well drained by paved gutters at the sides of the streets, and these lead into the river beds, which are in places well paved. It is contemplated to continue this useful work at an early date.

(c) No alteration since last report.

(d) Indian Coolies are inclined to overcrowding, but are under careful inspection.

(e) and (h) Same as previously reported.

(f) (g) and (k) Same as usual.

(i) No definite step has been taken to decide upon a new burial ground for the town.

(l) The accommodation for infectious diseases is the same as previously reported. Besides the Victoria Fever Hospital (16 beds) and the iron rooms at the Albany Hospital for cases of Contagious Disease, there is a small building for Small-pox provided by the town and situate about three miles out. There is no provision for housing lepers until they can be removed to a station.

(m) In 1904, in Grahamstown, there were twenty-two cases of Enteric Fever notified. Of these five came from the country; the other cases occurred at scattered localities within the town, and could not be looked upon as an "outbreak." They were not traceable to food, milk, or water supply.

Of Diphtheria there were seventeen cases, five from without the town, and of the remainder nine occurred in one school. Efforts to obtain cultivation from water, milk and food were unsuccessful, and the source of the outbreak remained undiscovered. None of these cases were fatal.

Small-pox.—One case appearing on the list of notifications proved to be Chicken-pox, and was discharged from the lazaretto on the second day.

In 1905 there were forty-one cases of Enteric within the town. Of these thirteen came from the location and surrounding district. Twenty-two cases occurred, scattered about the town and six cases were developed at the Albany General Hospital. This latter occurrence has caused much concern at the hospital. The first case appeared on the 8th June and the second on 15th June, both being probationer nurses. On the 22nd July another probationer became ill, and on 26th July, a housemaid. On 15th August a patient who had been admitted to a private ward (female side), and was just about to be discharged after a surgical operation, developed Enteric of a very severe type. No further cases occurred until December, when the female cook (European) fell ill. Of these one died, a young probationer. Every effort has been made to discover the source, but in this old building with a perfect network of drains, some now unused, it is impossible to point out a definite source. The wash-house in the small yard at the back of the female end has been condemned, and will shortly be demolished. In such an antiquated building, added to and altered from time to time since the year 1854, it is probable that outbreaks would occur. The arrangements for dealing out meals, in close proximity to the sinks and w.c.'s, are faulty and yet difficult to remedy in a building so badly designed. The demands for a new building are urgent, and it would be wasting money to attempt to remedy the present buildings by anything less than a clean sweep.

Diphtheria was not of a severe type, and only eight cases were notified.

Scarlatina was not prevalent, of three cases notified, two came from the country.

A single case of Small-pox occurred at Collingham, about ten miles from Grahamstown. It was isolated on the farm, and the contacts carefully vaccinated and put under control. The source of infection could not be traced. Mainly owing to the prompt action of the Divisional Council, the disease spread no further. The patient recovered.

Vaccination was carried out at seventeen centres with a fair amount of success.

4. ALBERT.

(i) ALBERT.

DR. JAS. T. BOLGER, DISTRICT SURGEON.

(a) As already stated in my report for the first six months of 1904, the water-supply was fairly good. Since then, however, the quantity has been woefully insufficient. The Council was compelled to limit the supply to certain fixed hours, morning and evening. Doubtless they recognised the advantages of a continuous supply, and, conversely, the drawbacks of domestic storage, but they were really left no choice in the matter, and certainly, placed as they were, one can only endorse the action they took.

As the springs on Lyndene from which the dorp is supplied have steadily weakened for some years, the Municipality has cast about for fresh sources, and has taken expert advice on the question; the conclusion arrived at was that boring near the present intake was more likely to be successful than alternative plans. This was done a few months ago, and water found. The next step was to erect a wind-pump, which worked well enough as long as the wind blew, but coming to the calmer months, the result was naturally and inevitably not so good, and I hope 1906 will see some satisfactory solution of our water troubles. I should not omit to mention that the Cape Government Railways have come to our rescue by allowing us—for a modest consideration—ten thousand gallons daily when we have been particularly hard pressed.

On the rare occasions on which we have had rain the water has again been discoloured, so that the remarks made in more than one previous report still stand.

(b) There is no sewerage system, nor will there ever be one. Drains are not ideal, but they are vastly improved compared to some previous years, but they are not overworked, since their only function is to carry off rain water, a thing we do not often see nowadays.

(c) The collecting of night-soil is well done—indeed, very well done, save for one detail, which I have previously criticised. The system of emptying the tubs into a tank-cart still obtains, and its drawbacks are as obvious as ever, and its advantages are two only, viz., a certain simplicity and undoubted economy, as compared to a more satisfactory method from a sanitary point of view.

The collecting of slop-water has always been well done, and I am pleased to be able to say that household refuse is dealt with with a promptitude and punctuality not always in evidence previously.

(d) As about 10 per cent. of the houses in this dorp are vacant, overcrowding is a thing of the prosperous past, and there is no present evidence that it is likely to become an evil in any save a remote future.

(e) These are all, so far as I know, well kept, and I do not know of any cases of illness traced to any of them.

(f) We have had one death from sardine poisoning, that is to say, a consideration of the circumstances of the case, the symptoms during life and the *post-mortem* examination, justify the above diagnosis as being the most probable cause of the fatal illness. Care will minimise the number of such accidents, but it is highly improbable that care will ever quite abolish them, and, of course, local conditions of food storage had nothing to do with such a case as the foregoing.

(g) I know of no swine in this village. The Sanitary Inspector's reports are almost always to the effect that all yards are clean, consequently I can only conclude that the fairly numerous dorp cows constitute no nuisance.

(h) So far as my observation has gone, the Location is fairly clean; certainly better than in some previous years. Not being Medical Officer of Health, I am not in a position to say whether the Location latrines are exclusively used, and also whether they are properly maintained.

(i) The cemetery has never been a danger to the public health.

(k) The main nuisance I consider to be the dust of the streets, and unless the Municipal Council can see their way to removing this when it is in the form of mud, we can hope for no improvement. The sweeping up of dust as is here done by convict labour is a farce, nor could it be otherwise. The dust is sent up in the air, and settles down again, the amount actually collected and removed being a small percentage only. It is not meant to infer that it would be better to do nothing at all, but unquestionably removing the mud is the more excellent away. The occasions on which it could be done are few, but even in the driest years we get some rain. Probably, however, the difficulty is in reality a financial one, in fact, I think I may so put it, without—to use a recent phrase—“terminological inexactitude.”

(l) There is none whatever. Did an urgent occasion arise we should have to resort to tents.

(m) Neither in 1904 nor 1905 had we any Small-pox. Typhoid we have always had, and these two years are only an exception to the rule, in so far that the cases were not numerous. The cause was in no case clearly made out, probably infection of milk, sugar, cheese, etc., by flies is as likely to be correct as any other explanation. The number of Diphtheria cases in 1905 was greater than in any year since 1897 (I cannot speak for years anterior to this date), but the mortality was in untreated cases only. Measles did not account for a single death in either year.

Taking the years separately, Typhoid appears as the cause of 8 deaths in 1904, but of these cases only five were certified; Diarrhœa of 17, ten being uncertified; Bronchitis of 18; Diphtheria of 3, two being uncertified; Influenza of 3; Scarlet Fever of 1; Whooping Cough of 1 (uncertified); and Syphilis of 2 deaths, both certified. Pneumonia caused 22 deaths according to the Register, and Phthisis 27. This last figure is appalling in view of the fact that the number of deaths from all causes was 221. When analysed, the figures divide out as follows:—Certified, 20; uncertified, 7; European, 4; Coloured, 23. Evidently Tuberculosis is the cause of more deaths in this District than is generally credited. In 1905 the figures for this disease are slightly better, though still very high, viz., 19, out of a total death-roll of 184, and they analyse as follows:—Certified, 15; uncertified, 4; European, 0; Coloured, 19. Pneumonia caused 7 deaths; Bronchitis, 33; Typhoid, 3, two being uncertified; Whooping Cough, 3, two uncertified; Influenza, 4, two uncertified. One death is returned as being due to "*post-mortem hæmorrhage*," a pretty startling statement, and we feel sorry for whoever has to "work the sum to prove it," the Maze at Hampton Court would be a simple problem compared to this.

Public vaccination has been confined to the dorp during the past two years. I advised against an annual tour in the District, the expenditure being out of all proportion to the result, but, of course, this reasoning will not hold good indefinitely.

(ii) SUB-DISTRICT OF VENTERSTAD.

DR. ALBERT P. COATES, ADDITIONAL DISTRICT SURGEON.

The general health of the District has been extremely good, especially in the year 1905.

(a) The water-supply has been rather worse than usual, especially in the spring, but the drought was very severe, both years. The Municipality are now building a reservoir that ought to improve matters a good deal, as far as water for domestic purposes is concerned.

(b) There is neither sewerage nor drainage.

(c) The collection and disposal of night-soil, and refuse of all sorts, are carried out by the Municipality in a very efficient manner; that of slop-water, unfortunately, is left to the individual.

(d) There are no overcrowded dwellings or dwellings unfit for habitation, as far as is known.

(e) The management of slaughter-houses, butcheries, bakeries, dairies and other trades affecting health is under the inspection of the Local Authority and well looked after.

(f) Very little is done in this way, and that entirely by private individuals.

(g) Hardly any animals are kept in the village.

(h) There are two Native locations, close together. They are well looked to, and are in good order.

(i) The cemeteries are now closely looked after, but do not look very well, as the carelessness of previous years is greatly in evidence, and, furthermore, they are almost devoid of trees, owing to scarcity of water.

(k) The Local Authority are very much more careful now than ever previously in looking after their area, mainly, I think, owing to the energy of the Town Clerk, and they deserve great credit for the improvements carried out in the last year or so.

(l) One small wood-and-iron building, with one room, belonging to the Municipality is the only Hospital accommodation.

(m) There were two cases of Enteric, on the same farm, one mile from the village; one in April, 1904, and the other in May, 1904; both recovered. Source of infection could not be ascertained. A military camp was situated for a considerable time at the homestead during the latter part of the War, and I saw one case of Enteric in that camp. One other case of Enteric occurred in October, 1905.

The patient was my own cook, a Native girl, living in the location. She recovered, after a severe attack. I could not ascertain source of infection.

There was no Diphtheria.

There were five cases of Scarlatina in the latter half of 1904.

There was one case of Puerperal Fever in 1905.

There was one outbreak of Small-pox. The first case was discovered on 1st May, the rash having appeared that morning. The last case was discharged on 20th June, 1904. All were pre-vaccinated, were mild, and all recovered. I have no doubt in my own mind the infection came from Rheboksfontein, the seat of the last outbreak in these parts. The sick and contacts were separated and quarantined. All were vaccinated repeatedly until it was apparent they were immune. Vaccination was performed daily for weeks after discovery of the outbreak, but the cases were so mild that the general public did not believe it was Small-pox, and, consequently, did not present themselves for vaccination. It is a great pity that persons are not compelled to have themselves inspected, after having been vaccinated gratis, and, until this is done, it will be quite impossible to give anything like an accurate estimate of the success of the operation.

The total cost incurred by the Local Authority was £71 3s. 8d., that by Government direct, nil.

There were no cases of Measles or Bubonic Plague in either year, and rats are unknown in this Sub-District.

There were no unusual diseases such as Scurvy, etc.

5. ALEXANDRIA.

DR. PASCOE B. GRENFELL, DISTRICT SURGEON.

(a) The drinking water is collected chiefly in galvanised iron tanks. There are also some wells and dams in the village. The wells are not properly fenced, and the dams become very polluted. The Coloured population get their drinking water from the wells and dams. The rains during the period covered in this Report have been very good, and there has been no shortage of drinking water. There is a borehole in the gaol yard, which can furnish a very large supply of water. This is slightly brackish, but is quite fit for human consumption.

(b) There is no system of sewerage or drainage.

(c) No system exists for the disposal of night-soil. Cesspools are in use, and refuse is buried.

(d) There is no appreciable overcrowding.

(e) Sheep are slaughtered in the village in the yard of the only butcher's shop in the village; this is right on the main street, and the refuse from the sheep is buried in holes in this yard. At times the stench from these holes is very offensive. I think that all killing and cleaning of animals ought to be done outside the village. Pigs are frequently killed in the village.

(f) Satisfactory.

(g) Cattle are kept in the yards adjoining residences. The stench from some of these places is at times very offensive. Swine are kept in the village, and are also a source of great danger to the health of the village.

(h) Nil.

(i) The cemeteries are in good order.

(k) There has been no abatement of nuisances, with the exception that the butchers shop, which was also a dwelling-house, has been rebuilt, and the shop is now distinct from the house. Cattle are no longer allowed to wander about the streets at night—if any are caught, they are impounded. A Pound has been fenced off, but it has been put in a bad position. The drainage from this would run into the main dam.

(l) There was a Kafir hut a little way out of the village which was built in August, 1904, by the Divisional Council, to be used in cases of contagious or infectious diseases. It has not been used up to the present time.

(m) One case of Diphtheria during the year 1904 was seen by me, and as far as I could trace its source it seemed to come from the Albany District. No cases of Small-pox, Plague, or Measles occurred during this period. Starting in June, 1904, there was a sharp outbreak of Enteric Fever in the part of the District surrounding the village. In all there were thirteen cases among the Coloured people, and twelve cases among the Europeans. Among the white people two died, and among the coloured people three died. This outbreak originated from a child who came from Grahamstown, and developed Enteric soon after arriving here. On

the farm Krnisfontein, in three sets of huts there were eight cases of Enteric. All these people drank from a well around which a Kafir woman had done the washing for the family of the first case. One white man also contracted Enteric from this same source. Most of the European cases in the village were the result of direct contagion. This epidemic spread itself over about four months, and during this time there were cases of Enteric scattered over different parts of the district. Some of these people were seen by me, and some by other practitioners. There were probably a good many more cases than I have reported. The Divisional Council took active steps to stop the spread of this epidemic.

The general health of the District during the year 1905 has been very good, there having been no epidemics of any kind. The winter was unusually severe, and Bronchitis and Pneumonia were very prevalent. Phthisis is very common among the Hottentots and Kafirs, and owing to their mode of living, Phthisis runs an acute fatal course with them.

No vaccination was performed in 1904. In 1905 I carried out a vaccination tour, and during the year I vaccinated 707 people. As far as I could make out, the vaccinations were mostly successful. There is a good deal of Syphilis among the coloured people. I think that a mistake has been made in closing the Contagious Diseases Hospital, as I find that these people come up very irregularly for out-patient treatment, particularly when they have far to come.

In particular, with regard to the public health of this village, I should recommend that:—(1) No animals be allowed to be slaughtered in the village; (2) The refuse from slaughtered animals be buried outside the village; (3) Cattle and sheep ought not to be allowed to be housed or kraaled in any place in the village that is in close proximity to a house or church; (4) Pigs ought not to be allowed to be kept in the village; (5) The Village Management Board ought to appoint a Medical Officer of Health and a Sanitary Inspector.

6. ALIWAL NORTH.

(i) ALIWAL NORTH.

DR. FRED. FULSS, DISTRICT SURGEON

During the period under review the Local Authority has shown considerable activity in improving the sanitary condition of the town. Some of these measures are already completed, and some are still being worked at. They will be detailed under the several headings below. The Municipal Council consists of an able, active, progressive body of men, whose interests are always for the welfare of the town, and the members of this body, with their able officials, can be unreservedly congratulated, as, due to their energy, Aliwal North is fast becoming one of the most sanitary towns, as well as one of the pleasantest to live in, in the Colony.

With its cool, clean streets, its pleasant surroundings, its beautiful climate, and its improved sanitary conditions, the town is coming rapidly to the fore as a health resort.

(a) The water used is, as in former years, that drawn from tanks. Such water is, of course, liable to pollution, as it descends from the roofs into the tanks, and even in the tanks themselves.

I had hoped to have reported this year the completion of the Aliwal North water scheme and the use for domestic purposes of clean filtered water from the Orange River, but although the scheme is more or less in working order, the unfortunate fact remains that the water pumped through the town is unfit for domestic use. The reason of this is that the filter-beds in the river are not acting, and so the water that is pumped up and passes through the taps is just the unfiltered water of the Orange River. When the rainy season is on, the Orange River is in flood and the water is discoloured, thick, and muddy. During the winter months, when the rains cease and the river settles, the water becomes clear.

As a result of the water scheme as it now stands, the town is amply supplied with water for gardening and other purposes; a huge tract of land along the banks of the Orange River is under irrigation, and the town is supplied with the electric light. The Town Council is actively engaging itself as to the matter of having the water filtered, so that it can be used at all times for drinking and other domestic uses, and I am of opinion that ere very long this will be successfully carried out. There is no doubt that when completed the Aliwal North waterworks scheme will be one of the most clever and successful engineering feats ever carried out in this country.

(b) There is no sewerage system here,

As regards drainage, the storm-water is carried off by means of furrows. In the matter of furrows, the Local Authority has done a lot of good work during the current year. Many of the streets have been kerbed, and the channels laid with stone. Furrows also have been paved with stone, and these are now swept and easily kept clean. The principal streets are frequently sprayed with water from the town mains, the result being the laying of the dust, and the prevention of the blowing about of disease germs, also reducing irritative diseases of the respiratory tract and ocular affections.

(c) With regard to the disposal of night-soil and refuse, etc., immense improvements are being made. A new system of sanitary removals is being commenced. Night-soil pails will be removed twice a week, a clean, tarred pail being placed in the closet each time. From several places such as hospitals, schools, public offices, gaol, etc., the pails will be removed at more frequent intervals. Household refuse will be taken away once a week and slops every second day.

(d) I do not know of any overcrowded dwellings, but the Sanitary Inspector would no doubt have reported overcrowded dwellings or dwellings unfit for human habitation to the Council had any such come under his cognizance.

(e) The slaughter-houses, butcheries, and bakeries are clean and well managed. There are no proper dairies in town, but the bulk of milk supplied to the inhabitants comes from well-kept dairies on farms adjoining the town, the milk being delivered out of clean, properly-constructed milk cans.

(f) The storage, etc., of human food are done on clean healthy lines as far as I know.

(g) The keeping of swine is not allowed in town. Cases have occurred in which cattle kraals have been reported as being insanitary, but such have always soon been remedied.

(h) As in my former reports, so now, I can still further state that the Municipal location is in a good sanitary condition, and is kept clean, and in good order.

During the course of the year, I issued a special report on "Greathead's" Location, and in that report condemned the state of affairs existing there as revealed to me on my inspection.

Since then, I am glad to say, the condition of that location has been considerably improved. Six new latrines have been erected. The rubbish heaps have been removed and buried, and now a European caretaker has been appointed to see that the place is kept in good order, and when I visited there a few days ago, the location was found clean and sanitary.

(i) The cemeteries are well kept. I must again reiterate what I have stated year after year, that the Dutch Cemetery ought to be closed and another spot chosen, as it is now almost built round by dwelling-houses.

(k) Whenever any nuisance is reported it is dealt with at once by the Sanitary Inspector.

(l) Hospital Accommodation.—At present no Hospital exists for the isolation and treatment of cases of infectious disease, but one soon will be erected. Government has contributed fifty pounds towards the expenses of building such a Hospital, and the Local Authority has granted another one hundred and five pounds. Tenders for erecting the building have been accepted and a start will soon be made. Although the Hospital will be a comparatively small one, it will be a great boon, as such a place is urgently required here. The Hospital belongs to both Government and the Local Authority, and will consist of a ward with four beds, a caretaker's room, a kitchen and store-room.

(m) The following infectious diseases were reported during the years 1904 and 1905:—1904: Chicken-pox, 5; Erysipelas, 1; Enteric Fever, 26; Puerperal Fever, 1. 1905: Enteric Fever, 14; Small-pox, 4; Erysipelas, 2; Measles, 23; Puerperal Fever, 3.

Immediately after the summer rains Enteric Fever manifests itself every year. It is one of the legacies left us from the late Anglo-Boer War. The cause of the infection is undoubtedly the tank-water, which becomes contaminated on the roofs and in the guttering of the houses, before it descends into the tanks, and even in the tanks themselves when these are neglected and uncovered. Fortunately, as a rule, the mortality is very small.

As regards the four cases of Small-pox. The disease was introduced from Herschel by a coloured house-girl. Prompt action was taken by the Local Authority and the spreading of further infection immediately stopped.

During the course of the year 1905, I vaccinated 291 persons, of whom 256 were primary vaccinations. The cost to Government was £10 13s., or a fraction over 8d. per head. From enquiries made, I am of opinion that 90 per cent. of the primary vaccinations were successful.

A mild epidemic of Measles commenced about the beginning of September, 1905. Twenty-three cases were reported at the Town Office, but as the disease was for the most part confined to coloured children at the location and elsewhere, there is no doubt that the few cases reported were only a small percentage of the number really affected. The epidemic was mild in character, and where ordinary care was exercised recovery was rapid. As far as I can find out, five deaths can be attributed to Measles—these were all amongst coloured children, except one, and were due to the catarrhal sequelæ following upon the disease from neglect and exposure. At the end of the year the epidemic had practically ceased. I did not consider it necessary to prevent any Public School from re-opening on account of Measles being prevalent, because very few white children were affected—this opinion I forwarded in my Special Report on the subject.

Before concluding my report it would be as well, I think, to group together the different sanitary improvements made by the Town Council during the year. They are as follows:—

- (1). Dual system of night-soil pails—a clean tarred pail left each time in place of the soiled one. This is done once a week.
- (2). Household refuse, etc., removed once a week.
- (3). Slops removed every second day.
- (4). Streets kerbed and channels laid with stone. Furrows paved with stone and swept and kept clean.
- (5). Sprinkling of principal streets with water.
- (6). Building of an Isolation Hospital.
- (7). Improvement of “Greathead’s” Location.
- (8). Installation of electric light, doing away with the evil smells and fumes of oil lamps.
- (9). Improvement of bath-house generally.
- (10). The supplying and removal daily of a special sanitary pail at houses where there are cases of Enteric Fever.

I can safely say that very few Councils in the Colony can boast of having done such good work during the course of the year, and the Town Council of Aliwal North deserves the deepest gratitude of the ratepayers for its untiring efforts toward everything which improves the health of the community, and so makes life brighter and happier.

Vital Statistics :—1905.

			European.	Coloured.	All Races.
Estimated Population middle of 1904	...		2860	4795	7655
Number of Deaths	...	...	33	125	158
Death Rate per 1,000	...	...	11·54	26·07	20·64
Number of Births	...	...	68	101	169
Birth Rate per 1,000	...	...	23·78	21·07	22·08

It will thus be seen that as regards the European population the number of births is more than double the number of deaths, while as regards the Coloured the deaths exceed the births by 24. The death-rate among Europeans of 11·54 per thousand is an extremely low one, and it is doubtful whether any other town can show as low a mortality. The mortality amongst the Coloured population of 26·07 per thousand of the estimated population there is a diminution of 11·44, or half of the with the year of 1903, there being only three exceptions, namely, Green and Sea Point with 13·65 per thousand, East London 25·42, and Swellendam 25·62 per thousand. If we compare the year 1903 with the present year, we will find a still more satisfactory state of affairs, as is shown by this comparative table.

Comparative Table of Death Rate for the Years 1903 and 1905 :—

Year.			European.		Coloured.		All Races.	
			No. of Deaths	Death Rate per 1,000.	No. of Deaths	Death Rate per 1,000.	No. of Deaths	Death Rate per 1,000.
1903	...	...	39	22·98	137	38·64	176	33·57
1905	...	...	33	11·54	125	26·07	158	20·64

Although the population has increased from 5,243 in 1903 to 7,655 in 1905, we find fewer deaths during the latter year than during the former, namely, 6 less amongst Europeans, and 12 less amongst Coloured. Taking the death-rate per thousand of the estimated population there is a diminution of 11·4, or half of the rate existing in 1903 amongst Europeans, that is to say, the death-rate of 1905 is half the death-rate of 1903. Amongst Coloured Races the mortality is less by 12·57 per 1,000, or more than one-third less than in 1903. Still again, taking all the races combined, the mortality for the year is less than in 1903 by 12·93 per thousand or between a half and a third less.

This lessening of the mortality is largely attributable to the improved sanitary conditions obtaining in the town and locations.

Comparative Table of Birth Rate for the Years 1903 and 1905 :—

Year.			European.		Coloured.		All Races.	
			No. of Births.	Birth Rate per 1,000.	No. of Births.	Birth Rate per 1,000.	No. of Births.	Birth Rate per 1,000.
1903	...	...	51	30·05	140	39·48	191	36·43
1905	...	...	68	23·78	101	21·07	169	22·08

The number of European births for 1905 shows an increase over the number for 1903 by 17, but due to the increase of population the rate per thousand is less.

The number of births and consequently much more the birth-rate for the Coloured population shows a considerable diminution to that obtaining in 1903.

The following are the causes of death in their order of frequency, distinguishing between European and Coloured :—

Pneumonia (Broncho-Lobar-Capillary), E. 3, C. 26; Infantile Diarrhœa, C. 14; Prematurely Born, C. 13; Consumption, E. 4, C. 7; Heart Disease, E. 2; C. 8; Bronchitis, E. 2, C. 7; Meningitis, E. 2, C. 5; Gastro Enteritis, C. 7; Convulsions, Marasmus Debility, E. 2, C. 5; Measles, E. 1, C. 4; Senile Debility, E. 1, C. 4; Tuberculosis, C. 4; Carcinoma, E. 1, C. 2; Drowning, E. 2, C. 1; Tabes Mesenterica, C. 3; Puerperal Fever, C. 2; Syphilis, C. 2; Gangrene, E. 1, C. 1; Enteric Fever, E. 2; Rheumatic Fever, C. 2; Cirrhosis of the Liver, E. 2; Peritonitis, E. 1, C. 1; Spinal Disease, E. 1, C. 1; Apoplexy, E. 1; Diphtheria, E. 1; Cut-throat, E. 1; Oedema Glottidis, C. 1; Shock, C. 1; Epileptic Fit, E. 1; Dysentery, C. 1; Burning, E. 1; Diseases unnamed in Death Register, E. 1, C. 3. Grand total, E. 33, C. 125.

What strikes one most in looking over the above list is the considerable mortality due to preventable diseases. Taking Pneumonia, Infantile Diarrhœa, Premature Births, Bronchitis, Gastro Enteritis, Convulsions, etc., Measles, Tuberculosis, Tabes Mesenterica, Syphilis, and Diphtheria, we find there are accountable for 94 deaths out of 158. There is no doubt that the time has arrived when every death not certified by a medical man should be investigated by some means or another. As will be noticed four deaths were registered, and no causes given, and no investigations held. It seems to me that such omissions render the "Births and Deaths Registration Act" practically null and void. When we look over the causes of death registered from the District, we find such ridiculous and unsatisfactory statements as "Working while pregnant," "Convulsive Spasms," "Chest Complaint," "Kidney Complaint," certified as the causes of death.

Even where medical certificates are granted, the primary cause of death is sometimes not made clear, or even mentioned; *e.g.*, "Convulsions" is mentioned as the cause, without stating whether due to any brain, stomach or other primary affection. Again, "Debility" in a child is given as the cause of death, and no further information is furnished as to whether due to improper feeding or want of sufficient nourishment or to disease. Cardiac failure is another cause of death given, but we are not informed what brought about this condition. It is most important that the primary cause of death be always stated.

The Rainfall for the year 1905 was as follows :—January, 1·77; February, 2·88; March, 3·08; April, 1·88; May, 0·67; June, 0·36; July, 0·00; August, 0·25; September, 1·87; October, 0·16; November, 0·66; December, 1·96. Total rainfall, 15·54.

(ii) SUB-DISTRICT OF JAMESTOWN.

DR. C. G. WOODS, ADDITIONAL DISTRICT SURGEON.

(a) to (l) No alterations since last report.

(m) No Infectious Diseases occurred to my knowledge. There was one case of Measles on an isolated farm at Roodehoeke, Allemans Poort, Wodehouse District.

(iii) SUB-DISTRICT OF LADY GREY.

DR. H. R. FORSTER TOWNE, ADDITIONAL DISTRICT SURGEON.

Excepting the outbreaks of Scarlet Fever in 1904 and of Measles in 1905, the general health in this town and District has been good.

(a) The present supply is the same as in former years. The Municipal Council has now definitely arranged to have a reservoir built in the kloof above the town.

The reservoir will contain an abundant supply of good water, which will greatly benefit the town, from a sanitary point of view.

(b) As before.

(c) The collection and disposal of night-soil and household refuse is satisfactory; there is no organised method for the disposal of slop-water.

(d) Very few cases of overcrowding have been reported, and these have been satisfactorily dealt with.

(e) There is a distinct improvement in the cleanliness of the slaughter-houses and butcheries; these premises are regularly inspected by the Medical Officer of Health and by the Sanitary Inspector.

(f) and (g) As before.

(h) The Native location is fairly clean. The good rains that we have had of late have exercised a most beneficial influence in flushing and cleansing the sluits bordering on the location. Owing to the dirty habits of the inhabitants of the Hottentot location, the Municipal Authorities experience great difficulty in keeping that location in good sanitary order.

(i) As before.

(k) By the enforcement of the provisions of the Public Health Amendment Act, which call upon landlords to erect suitable sanitary conveniences for their tenants, the Municipal Council has been able to get rid of a number of undesirable residents, the landlords preferring to give notice to their tenants rather than incurring the cost of erecting suitable conveniences. There are now very few Natives residing in the town.

(l) As before.

(m) Enteric Fever.—In the early months of 1904 there were four cases of Enteric Fever. There have been none since then.

The epidemic of Gastro Enteritis, which was so severe in December, 1903, continued in January and February, 1904; it subsided with appearance of rain and the consequent improvement in the water-supply.

Scarlet Fever was very prevalent in 1904, but of mild type, no deaths were reported; on closure of the schools the epidemic subsided.

Diphtheria, 1904.—One case in town and five in the country. Three deaths occurred.

1905.—Six cases in town, three in the country. One death occurred.

Measles.—Very many cases, both in town and country, in 1905, in fact very few houses escaped; fortunately the cases were nearly all of a mild type, only three fatal cases being reported.

The spread of Scarlet Fever in 1904 and Measles in 1905 was very rapid. No precautions were taken by the parents; sick and healthy children were allowed to live and sleep together in the same room, and sick children were frequently seen in the streets. It was an impossible task to impress upon the people the serious nature of the diseases, or to get them to disinfect or isolate in any way.

Small-pox.—In December, 1904, there was a slight outbreak in the Municipal Location and on the farm Zachte Vlei, at the Municipal boundary. There were five cases in all—three pre-vaccinated and two unvaccinated; the pre-vaccinated cases were mild, the unvaccinated rather severe. No deaths. The patients were isolated, and the contacts were quarantined and vaccinated.

The cases in the Municipal Location were under the care of the Medical Officer of Health. The source of infection was a Native from Herschel.

Public vaccination was performed in April, 1904, 301 persons being vaccinated.

The results were good. Since then no public vaccination has been performed, but many have been vaccinated gratis at the residence of the Additional District Surgeon.

No cases were treated under the Contagious Diseases Prevention Act. No cases of Leprosy were reported. One indoor pauper and one outdoor pauper received relief in 1904.

No outbreak of Bubonic Plague occurred, nor were special precautionary measures adopted.

7. BARKLY EAST.

(i) BARKLY EAST.

DR. A. R. WILHELM, DISTRICT SURGEON.

(a) The condition of the water-supplies in the town of Barkly East have remained unaltered except that various private individuals have sunk on their own property wells and bore-holes during the years 1904 and 1905.

Both operations have been attended with considerable success, but the Municipality ought to insist, if the law allows it, that the wells and boreholes are protected from surface contamination.

(b) to (l) No changes have taken place.

I wish to remark, though, that it would be very much better if the Municipality would undertake the removal of slop-water and household and other refuse instead of leaving it to each private individual. It is a great nuisance to have refuse deposited, along all the main roads leaving town, by farmers, who, after living in town for some time, load up their refuse on to their wagons, and on the first good opportunity throw it simply on to the main road.

The shambles let by the Municipality to the two local butchers ought to be kept cleaner, and certainly no stench of any description ought to be tolerated.

(m) Enteric Fever was very prevalent during the year 1904; twenty-two cases occurring in the town of Barkly East, and fifteen in the District. In 1905 the number of cases notified were respectively three and one.

In the town the cases occurred chiefly among the Natives, and in the country chiefly among Europeans. The epidemic of Enteric had practically left the District in February, 1905, only an isolated case occurring in September, 1905.

In a good many of these cases the infection, I am convinced, was contracted by careless nursing of some relative, who had brought the disease from one of the adjoining lower Districts.

I certainly cannot blame the water-supply of this District.

Diphtheria.—If 1904 was characterised by an outbreak of Enteric so was 1905 by an outbreak of Diphtheria. In the town and country during 1904 eight cases occurred in each; in 1905 the numbers were respectively nine and twenty-one.

It was really one epidemic, which commenced in the end of July, 1904, and was at its height during the early part of 1905. The disease was certainly spread by the ordinary roads of communication from person to person.

Small-pox.—In 1904 the District was free of Small-pox, but during 1905 three outbreaks occurred in the District. The first was discovered on the 3rd February, on the farm Aylesbury, in a family of Basuto farm servants. The wife was fourteen and the husband ten days ill, and from these the five-months-old baby contracted the disease. Wife and baby had never been vaccinated, whereas the husband had been a year previously unsuccessfully vaccinated.

On the 12th February another outbreak occurred at "Abo," in a family of Bastards, of whom six were found ill. One of these was a case of modified small-pox in a pre-vaccinated adult female; it was found that the disease had been contracted from Bastard friends in the neighbouring farm of Ashton, who had brought the disease from the District of Herschel. The last outbreak was discovered on the farm Locksley, on the 29th August, in a Tembu woman, and from her fourteen-days-old baby became infected and died. This was the only death in all these outbreaks. The means adopted for suppressing the disease were isolation of the sick and their attendants, and vaccination and re-vaccination of all contacts, and of everybody on that farm, and of everybody on some of the neighbouring farms.

The total costs were borne by the Divisional Council, and amounted to £19 13s. 3d.

Scarlet Fever.—During 1904 seven cases were noted in the town. The last notification being dated 23rd September, 1904. In 1905 no cases occurred in the town.

For the country the notifications were fifteen in 1904 and three only in 1905; the last occurring on the 2nd November, 1905. These cases of Scarlet Fever during 1904-1905 were the last cases of the epidemic that commenced in 1903.

Measles.—Of this disease only two cases were seen on the same farm during 1904. In June, 1905, some cases occurred in the country, but a very sudden and large epidemic commenced in September, which, though on the whole, taking a mild course, proved very fatal to infants. In many cases the disease was complicated by Varicella and Whooping Cough. I have dealt with this epidemic in a previous report.

Even in infants Bronchitis is a rare disease in this district; whereas Pneumonia is the most common acute disease of these mountain parts. In 1904 it was fairly common, though in 1905 it was not so prevalent. It is a very rare thing for a medical man to be treating a single case of Pneumonia. If I have one in hand, I expect during the week to attend three or four others; not necessarily, though, in the same locality, as the cases may be scattered over a wide area. There is one part of the district, not the "Ward Vaalhoek" but the "Valley of the Vaalhoek" proper, in which the disease shows itself always in a severe and virulent type. During the past fourteen years I have not known a case to recover in this locality except one in 1904, and I have seen it in the upper part of this valley as an epidemic. In the summer 1904-1905 the ordinary Summer Diarrhoea showed itself, accompanied by some mild cases of Dysentery—the same occurred again in the summer of 1905 to 1906, but with much greater prevalence and severity in the attack, and the disease has stayed with us longer than usual, even occurring now in April, 1906. Hydatids of the various organs are certainly becoming more and more frequent in this important sheep district.

It is so very difficult to teach the people the cycle of the Dog-tapeworm and the importance of curing their dogs of tapeworms for the protection of themselves and their children, and of not allowing so much familiarity with their pet dogs.

(ii) SUB-DISTRICT OF RHODES.

DR. CHAS. W. CALDWELL, ADDITIONAL DISTRICT SURGEON.

The Health of the District has been good.

(a) Drinking water is obtained from four fountains—two of which are situated in the river bed, the water is good and the supply sufficient.

Owing to the absence of any protection these fountains are liable to pollution from horses and cattle.

(b) There is no system of drainage.

(c) Every W.C. has its own cesspit, into which slop-water is emptied. Household and other refuse are deposited in three places set apart for that purpose by the Village Board of Management; these places are in the bed of the river opposite the centre of the village, a spruit above the village, and the bed of the river somewhat lower down, the first of these being the one most used.

(d) Such as one finds in an up-country village.

(e) Two butcheries with bakeries attached, they are kept fairly clean; the majority of the inhabitants are their own butchers and bakers.

(f) No cause for complaint.

(g) No restrictions are placed on the keeping of cattle and swine in the village.

(h) The Native Location is small, not clean, and there is no attempt at sanitation.

(i) The burial ground is not overcrowded.

(k) I would recommend that the fountains, the water of which is used for drinking purposes, should be fenced around and covered in so as to prevent the water being polluted by animals.

The depositing of household and other refuse, in a spruit liable to be washed down at any time by a heavy rain, and in the river bed, should not be allowed to continue; some other site should be chosen, one not inimical to Public Health.

(l) None exists.

(m) 1904.—The only cases of infectious disease that occurred were: Three of Scarlatina, of which two were in the same family; three of Diphtheria, and one of Enteric Fever. The Diphtheria cases were sporadic, it was impossible to trace the connection between the two cases of Scarlatina; the Enteric, in my opinion, was caused through drinking polluted water.

1905.—An outbreak of Scarlatina occurred in the village in the beginning of May, 1905, and lasted until the middle of June; there were in all ten notified cases, but I have no doubt that there were a considerable number of others not notified; the Public School was closed in consequence for ten days.

Measles was prevalent in the District followed by Whooping Cough in a severe form.

No general vaccination has been carried out in this District for over six years. No cases of Scurvy or Epidemic Pneumonia have occurred.

8. BARKLY WEST.

(i) BARKLY WEST.

DR. G. A. HEBERDEN, DISTRICT SURGEON.

The short report that I wrote for the first six months of 1904 was practically the history of the district for the whole year as regards general health.

There were no epidemics of an infectious character to report.

The usual vaccination tour was undertaken in October of that year, when 2,330, mostly Natives, were inoculated, I believe, with excellent result, but being unable to see them a second time it is impossible to give statistics.

The Contagious Disease Hospital was not closed down, but was kept open for Syphilis in a primary stage, which condition is hardly ever seen in Natives, and only one case has been admitted during the past eighteen months, and the building is rapidly falling into decay. I believe this to be a mistake, as no doubt hereditary syphilis is contagious, and on this account crops of cases are free about the district, there being very little control over their movements. I have visited the various Native Locations every quarter and have distributed iodide of potassium to such cases that have been found, and with very good results. I have also left drugs with the Inspector of Natives, who has dispensed them when required. There are about sixty-five cases scattered about, comprising several European families who have contracted the disease through Native servants.

There are, or have been, about six or eight cases of "Yaws" or "Tram-boesia" at Gong Gong, which came under my notice during October, 1905. I have made reports on the disease on two occasions. It is my opinion that this complaint should be kept under observation, but I have no authority to do so.

(a) There is nothing fresh to report with regard to the water-supply of the village. As usual the chief source is from the Vaal River, which for some months this year was practically dry, and great complaints have been made especially at the River Diggings, about the unsanitary condition of the water. Just before the river "came down" there was an outbreak of Acute Diarrhoea, and several children died in consequence.

(c) The collection of night-soil, etc., is in this village undertaken by the Village Management Board, who employ convicts for the purpose. As a rule convicts over three months are sent away to Kimberley and elsewhere, and often there are not sufficient to undertake the necessary sanitary arrangements, and the Village Board has been in great difficulties on this account. I have reported this every year, but no arrangements have been made to meet our requirements.

(d) There are no overcrowded dwellings in this village. This nuisance has been rectified during the last year.

(e) The butcheries and bakeries in the village are clean, and meet the requirements of the Act.

(g) Pigs are allowed to roam about the village.

(h) The Native Locations are in a fairly sanitary condition, and the majority of the Natives are obliged to keep to their surveyed ground instead of being scattered about, as heretofore.

(l) With the exception of the Contagious Diseases Hospital there is no hospital for infectious disease in the village.

(m) During August, 1905, two cases of Small-pox occurred; one in the gaol on August 8, in a prisoner that was admitted from Klipdam. He was isolated about a mile from the village in a tent, and every precaution was taken to prevent the spread of the disease, and with success. The other case was discovered at Delport's Hope on August 15, and in this case also there was no spread of the disease.

There was one case of Diphtheria at Delport's Hope in a European child who died. There was no history of the case as to the cause, I believe precautions were

taken, but it was not under my care. There were a few cases of Measles scattered about the district during November and December, 1905, but I believe no deaths. This village was not attacked, and throughout the district it has not been necessary to close a single school on this account.

(ii) SUB-DISTRICT OF KLIPDAM.

DR. E. VAUGHAN JONES, ADDITIONAL DISTRICT SURGEON.

Owing to the fact that I only came to this District on 1st June, 1905, I regret that I am unable to furnish any report on any period prior to that.

(a) The water of the mining camps of Klipdam and Holpan is derived from three private wells, all of which are some distance from the camp. The water is slightly brak, otherwise it seems good. The wells are carefully looked after, but the risk of pollution is undoubted in the case of the Klipdam wells, as the sides are not walled in. The well at Holpan is closed in. The water is delivered in casks at a cost varying from 1s. to 1s. 3d.

(b) Sewarage and drainage are absolutely nil.

(c) With regard to the collection of night-soil, there is no system in vogue, and as to disposal, each householder is required to dispose of it as he thinks best. Some houses have cesspools, others have the bucket system, from which the soil is removed from time to time and disposed of in the worked out claims.

Slop-water, household and other refuse are left to each householder to dispose of as he deems fit. The usual is that it is thrown out not far from the front or back door.

(d) Overcrowded dwellings and dwellings unfit for human habitation. The houses of the camp are chiefly composed of wood and iron, so that fresh air is plentiful, but the extremes of temperature between night and day are very marked in these places, and this may be the cause of the numerous cases of Pneumonia that prevailed during the winter months. I know of no instance of overcrowding.

(e) All the slaughtering is done about one mile outside the camp, so that there is no inconvenience. The butcheries and bakery are both well kept and clean.

(f) Sale, storage, and preparation of human food are satisfactory.

(g) There are numerous kraals in and around the camp, swine and cattle are allowed (particularly swine) to roam about the camp at large, and there does not seem to be any Local Authority to appeal to. There is a Diggers' Committee, which I am told is vested with great powers, but I have not known this committee to exercise that power in one single instance in matters respecting the health and cleanliness of the community.

(h) There are three large locations in the immediate vicinity of the camp, and much could be done in improving matters. The place should be put in better order and regular inspection carried out by the police or inspector. There seems to be no authority over these locations.

(i) The cemetery is in good condition, walled in and carefully looked after.

(k) The Scurvy Hospital is in existence for the treatment of Natives suffering from Scurvy. It is a corrugated iron structure, composed of two buildings, the one about 45 feet by 15 feet for males, and the other about 12 feet by 15 feet for females, and belonging to Government. There is no accommodation for infectious diseases.

(m) Last August there was an outbreak of Small-pox in the District, there being sixteen cases. Diphtheria, nil. Typhoid, nil.

Small-pox made its first appearance in the District at the Windsorton Location, on August 8th. The source of infection was directly traceable to Wedburg, as the patient was known to have been in contact with the case at that place. On 10th August two more cases were discovered at Klipdam Location, and on the 11th six cases were found at Kameelsputts, and at a subsequent date two more cases were found there and one at Windsorton. The last case was discharged on 16th October. In every instance the infected person was immediately isolated, the contacts vaccinated and disinfected, and the dwelling of the infected persons burnt, as it was impossible to disinfect these habitations composed of a skeleton of wood work covered with canvas bags and opened out paraffin tins.

A central Isolation Hospital was formed and two guards employed.

In all there were sixteen cases, out of which there were two deaths, the one died at the isolation camp, and the other at Kameelsputts I only saw after death.

The disease in my district was entirely confined to Coloured people.

Immediately on the outbreak of the disease the Natives in the vicinity of disease were vaccinated.

Everything possible was done by the Local Authorities to suppress the disease, but I would suggest that a thorough and efficient vaccination of the Natives of this district be carried out systematically and at regular intervals, as the locations around Boedsap are a favourite recruiting ground for Natives for the Kimberley mines and the River Diggings.

There has been no case of measles.

Pneumonia was very prevalent during the winter months from July to October. I had seventeen cases. There were two deaths out of the seventeen cases. Scurvy is endemic in this district, assuming epidemic proportions between the months of November and March, and is at its height in December and January.

Syphilis is very prevalent amongst the Natives of the District, but for the want of accommodation very few can be put under treatment.

9. BATHURST.

DR. CECIL E. JONES PHILLIPSON, DISTRICT SURGEON.

The general health of the District during the two years 1904 and 1905 has been good. No serious epidemics, with the exception of Whooping Cough, have called for enquiry. This complaint was responsible for a number of deaths among the Native children, through the complication Broncho-Pneumonia. A journey for the purpose of enquiry into the cause of the deaths was undertaken on June 22, 1904, to the area between Shaw Park and Trappes Valley. Measles, Chicken Pox and Mumps were prevalent during the months of May, June, and July, 1904. Adults suffered severely from Mumps; most of the males suffered with Testicular Enlargement.

There have been no cases of Small-pox during the period under report. The district is vaccinated annually—a tour to various centres sanctioned and approved by Government.

During 1904, 450 were vaccinated at a cost of £28 10s. No vaccination tour took place during 1905.

The results I believe were good. It is from hearsay only, as no second visit to the centres was made.

It is a difficult matter to muster people at a centre, notwithstanding the fact that every effort is made by the Resident Magistrate, the Field-cornets, and the assistance of the Cape Police, the usual vaccination notices and posters being issued to each centre and Field-cornetcy. There are very few cases of Syphilis in this district. Two cases of Leprosy have been certified and transferred. The confinement of Lunatics in Gaol Hospitals for any length of time beyond three days is unfair to the patients themselves, and a great inconvenience to gaol officials, besides being an additional expense to Government. The Magistrate, in conjunction with the District Surgeon, should have authority to transfer such cases to a proper Asylum without previously obtaining authority from Cape Town.

The number of births registered during 1904 was:—European, 28; Coloured, 272; Total, 300. During 1905:—European, 35; Coloured, 279; Total, 314.

The number of deaths registered during 1904 was:—European, 23; Coloured, 250; Total, 273. During 1905:—European, 20; Coloured, 204; Total, 224.

The population of this District is:—European, 2,014; Coloured, 8,737; All Races, 10,751.

It may be therefore considered that the death-rate in this district *is high*, to be accounted for in a great measure by the ravages of Tubercle and the high mortality among infants of the coloured section, through the unwarrantable neglect of the simplest precautionary measures by the parents.

The registration of the causes of death in rural areas is most unsatisfactory and of little or no value. It is impossible for it to be otherwise than unreliable, considering that the supposed cause of death is notified from a layman's point of view in the majority of instances. The death-rate is greatly increased by Tubercle in its various forms. Numerous cases come to my notice chiefly among the Native population throughout the whole district. In order to enlighten the Natives as to the cause and spread of the disease and the known means of minimising it, the Port Alfred Municipal Council, advised by me, issued a leaflet, printed in Kafir, and had it freely distributed by the Native clergy and deacons, who explained it to them. All consumptives treated by me are presented with a leaflet on the subject. It points out the ill effects of overcrowding, spitting into dry sand-pans, the necessity of spitting into some liquid disinfectant when affected with the disease,

and the value of light; free ventilation; systematic wet sweeping of the roof, walls, and floors of huts with some disinfectant added to water; the daily exposure of bedding to the sun or light, and the advantage of a climate away from the coast for those affected with the disease and other smaller points of value. I cannot say that the advice given has up to the present been seriously considered by them.

(a) The water is collected in ordinary galvanized iron tanks from rainfall or underground tanks. Cesspools likely to contaminate such underground tanks were condemned some years ago. For purposes such as washing, good springs exist, the water showing on analysis the albumenoid and free ammonia to be excessive, which, with the traces of nitrates and nitrites, rendered the water suspicious; moreover the high percentage of chlorides makes the water unsuitable for drinking purposes.

(b) Sewerage and Drainage.—No system exists, nor is it at present required with such a scattered condition of the houses.

(c) Night-soil is removed under the superintendence of an official in the employ of the Municipal Council and buried at certain specified spots. Slop-water and household refuse are usually buried in the gardens of each house. The inhabitants as a rule comply with the regulations for the disposal of rubbish, issued in printed form to each property owner. The visitors neglect the regulations; perhaps they are less to blame than the landlord who should have the Council's regulations properly affixed to a board and placed in a prominent position in each house which is let to holiday-makers. The Town Ranger compels defaulters to remove obnoxious collections.

(d) Overcrowded dwellings and those unfit for habitation do not exist in the township or location.

(e) The management of slaughter-houses, butcheries and bakeries and dairies is satisfactorily conducted. As Medical Officer of Health I inspect at irregular intervals and make any necessary recommendations.

(f) Conducted satisfactorily.

(g) Few inhabitants have cows, and the small number of kraals within the Municipal area are well kept. A Pound has been established under Municipal direction.

(h) The Native Locations—East and West Banks—are well situated, and little sickness prevails here at any time. Tubercle is frequently seen.

(i) The cemeteries for Europeans are well situated, picturesque and not overcrowded. The cemetery for the patients of the Port Alfred Asylum is becoming overcrowded. I was directed to furnish full particulars, from a surveyor's and geologist's and other scientific points of view, with reference to an additional piece of ground in the immediate vicinity of the present site. I was not able to supply the required information, and returned the correspondence to the Resident Magistrate, who forwarded it to the proper quarter for further advice.

(k) The abatement of nuisances is under the control of the Town Ranger; if necessary he is advised by the Medical Officer of Health.

(l) No hospital accommodation exists. The want of a Cottage Hospital is at times sorely felt.

(m) No Enteric Fever was reported. No Diphtheria or Small-pox has occurred during 1904 and 1905.

Persons arriving from Plague-infected areas are kept under observation for ten days.

10. BEAUFORT WEST.

DR. A. J. WESTBY, DISTRICT SURGEON.

(a) Same as last year.

(b) None.

(c) The night-soil is collected in buckets and carried by waggon some distance outside the town. The waggon is open. Slop water is collected in a tank waggon daily from those houses which require it, and it is certainly a great boon to the inhabitants. Refuse is also collected by the Municipality.

(d) As there is no bye-law or recognised standard to regulate the cubic space, one can only surmise that there is overcrowding to some extent.

(e) Butcheries, bakeries and slaughter places are kept clean, and in good order; there are no dairies.

(f) Same as last year.

(g) There is no bye-law against the keeping of swine in the town, consequently they are kept, much to the annoyance of some people.

(h) The Location is fairly clean, and in order, but there are many unsightly and insanitary huts still. It seems useless reporting on this.

(i) Good order, though the trees have suffered through the drought.

(k) Good.

(l) There is no Hospital. There are two blocks of brick buildings erected outside the town by the Municipality, one for Small-pox and the other for infectious diseases. These blocks consist of four rooms, each 10 feet by 8 feet, and are altogether unfit for the purpose. There is no accommodation for an attendant or for cooking food, and they are totally unfurnished. These places have already been reported on. They belong to the Municipality.

(m) During the year ended the 31st December, 1905, there were 24 cases of Enteric Fever, 50 cases of Scarlatina, 36 cases of Small-pox, and 1 of Diphtheria, reported in the Municipal area. It will be noted that there is a considerable drop in Enteric and Diphtheria, whilst Scarlatina has increased, and though of a mild type was alarming.

Small-pox broke out on the 11th May in a house off New Street in a Coloured boy, and since then has cropped up in different parts of the town. It is impossible to state from whence it came, and as I could get no information, I put it down as air borne. The theory as to its having been brought from some other place may be true, but as none of the patients have been away from the town for months one cannot attribute it to this; also I have not heard of it being prevalent in adjacent villages. I would suggest that the District Surgeon be informed of any outbreak of Variola in those places near his own district, so that he may take some precaution, and try and guard against its introduction into his own district.

The disease still continues. Those suffering from Small-pox have been treated in the Lazaretto (brick building referred to in (l)) and have been under the management of the Municipality. Out of the 34 patients 3 were white, and had been vaccinated during their youth, and the remainder were all unvaccinated or vaccinated after exposure to infection. One case came from the farm Delajalon, about twenty-five miles from the town, but as no steps were taken to inspect the farm I am unable to state if there were more cases. One death occurred in a child who was only brought to see a doctor a few hours before it died. The parents in this case were prosecuted, and convicted for not having reported the case sooner.

There were 509 persons vaccinated and re-vaccinated, out of these only 41 were white people, so it will be easily seen that the white population is in a bad way so far as protection is concerned if Small-pox should break out amongst them.

In the District I had three tours (9 centres). Number vaccinated 270, of whom 69 were white. I found the Lymph supplied to be perfect; in no case, so far as my knowledge goes, with one exception, did a primary vaccination fail to take, and this case was in a white adult, who informed me that although having been vaccinated on several occasions it has always failed to take effect.

I regret to have to report that vaccination is a perfect farce, and until this is carried out on some better system we may expect to be visited by these periodical outbreaks (vide my previous reports).

The total cost of the outbreak to 31st December, 1905, was £374 16s. 4d.

The Contagious Diseases Hospital was closed some time ago, as being unfit for use, but it has been used as a Pauper Hospital since, why, I cannot tell. No Bubonic Plague has occurred. There are no rats in the District.

11. BEDFORD.

DR. R. A. ROSS, DISTRICT SURGEON.

(a) The water-supply is partly stored in tanks from rainwater and partly obtained from a mountain spring, which is pure at its origin, but becomes polluted in its passage through the furrows, owing to the fact that pigs and other animals are allowed to wallow in them, as well as horses, cattle, etc., to drink out of them. The only satisfactory solution to the difficulty of water pollution, which is constantly occurring, is the erection of a reservoir in the Maastrom Estate, the water being laid on to the town by a proper system of pipes, and it may safely be stated that not until this is done will the public health of the town be properly safeguarded.

It is satisfactory to report that during 1905 a Bill for a water scheme for the town has been passed and that the reservoir is in process of construction.

(b) Nil.

(e) The bucket system has been in force for a few years, and is answering admirably, as compared with the old system of cesspits. A fortnightly removal by contract is an improvement on the former plan of giving the householder discretionary power as to time for removal.

(d) Nil.

(e) The slaughter-houses, butcheries, bakeries and dairies are kept in a satisfactory manner.

(g) Cows, sheep and goats are kept in kraals at night and driven to the commonage during the day. Horses are allowed to roam about the streets. Pigs are seldom kept in town.

The Municipality is however introducing a bye-law for the formation of proper kraals for sheep and goats at sites to be approved of by the Council; this will be a great improvement on the present arrangement of having large numbers of sheep and goats kraaled near dwelling-houses; and a very necessary one, as a number of cases of Typhoid occurred in the immediate vicinity of one of these kraals.

(h) The Native Location leaves much to be desired, as there is not only considerable overcrowding of huts, but there is also no proper system of disposal of night-soil; the result being that the excreta from Typhoid patients is thrown outside the huts and then disseminated broadcast over the location and possibly over the town. For this very reason Natives should not be allowed to be interspersed throughout the town, as in this way the water collected in tanks is liable to become polluted.

During 1905 the location was frequently inspected by a man appointed by the Council, but it is still to be noted that human excreta is only too frequently seen around the location.

(i) The cemetery for the town is well kept, and private burial-grounds in the country have never been complained of.

(k) The contamination of the water-supply is the principal nuisance; also to some extent the presence of sheep and goats in kraals in the centre of the town and near dwelling-houses.

(l) Nil.

(m) Infectious diseases were not very prevalent during the year 1904. There were a few sporadic cases of Typhoid, none of Diphtheria or Small-pox.

A vaccination tour of the district was made, but was poorly attended. Until it is compulsory for the vaccinated to report themselves on the eighth day it is impossible to say exactly what measure of success has been attained.

From the result of a few private cases one would judge that the lymph supplied was of good quality.

With regard to the year 1905, Small-pox was reported from the farm Princeton amongst some dam-workers, but the eruption proved to be one of Scabies.

There has been a good deal of Typhoid in town, notably in the particular locality near some kraals. There have also been sporadic cases of Typhoid in the country.

There has been no outbreak of Measles in the town or district.

There are presumably very few rats in town, as the Municipality have been on the look-out for any dead rats in view of the prevalence of Bubonic Plague in other parts of the Colony, and none have been found.

12. BREDASDORP.

DR. L. SCHLOSS, DISTRICT SURGEON.

(a) No improvements in the water-supply have taken place. Although the furrow is fenced in for about 200 yards to keep off cattle, the same pollution as reported before, goes on to a still greater extent since alongside the furrow a few new houses have been erected, but without closets or privies, and the inhabitants feel safe to make their deposits inside the fence. Until the water is conducted in iron pipes, nothing will prevent this kind of contamination.

(b) and (c) The authorities could not be moved to take steps.

(d) and (e) As reported before.

(m) The district has been practically free from epidemic diseases, with exception of an outbreak of Measles, which started among the Native population of the Mission Station Elim in the beginning of November, 1905, and spread on the farms in the neighbourhood. The disease showed generally a severe form, and especially when attacking aged people, was complicated with Pneumonia, Pleuritis and

affection of the heart. Ten deaths of Native children, mostly under two years, have been reported during November and December from Elim, one from Napier and two of European children and one of an adult in the district. Undoubtedly many deaths from Measles have been registered as Pneumonia, Convulsions, etc., and—in this case as well as generally—it is useless to base any reliance as regard the cause of death on the Register, as only exceptionally a medical certificate is brought in from the rural district. The number attacked I estimate as not less than about 200 at Elim and about 100 in the district; on some farms, where the disease spread, all the inhabitants were laid up at the same time, the disease, irrespective of race and age, sparing no one, who had not had Measles previously. Prompt steps were taken immediately by the Divisional Council as well as by the Principal of the Mission Station to prevent contact and spread of the disease, which is still in existence on some farms of the district.

Only a few sporadic cases of Typhoid Fever and Diphtheria have been reported in the district during 1904 and 1905.

During the vaccination tour 111 persons were vaccinated in 1904 and 317 in 1905. I had occasion to see a few successful cases, but no estimate can be given as to the amount of success obtained.

13. BRITSTOWN.

(i) BRITSTOWN.

DR. A. H. HOPKINS, DISTRICT SURGEON.

The health of the Village and District of Britstown during the years 1904 and 1905 was fair.

There were no serious epidemics of Infectious Disease during 1904. Four cases only of Typhoid Fever, a marked improvement on recent years, were reported during the year. In continuation of the Diphtheria epidemic of 1903, a few isolated cases numbering six, with one death, occurred. All the cases were treated with Anti-Diphtheritic serum, and all contacts received prophylactic injections. Two cases of Scarlatina occurred in a family which had recently come to the village. These were strictly isolated in their own homes, and the disease did not spread. There were slight epidemics of Whooping Cough and Mumps, the former disease being responsible for several deaths among young children. Two vaccination tours through the District were performed during the year the total number of persons (including the village) presenting themselves for vaccination being 380, of which number I estimate that fully 80 per cent. proved successful.

In the Contagious Diseases Hospital I treated thirty cases of Syphilis, as well as attending three outdoor cases of the disease.

I attended fifteen Inquests, and performed a like number of *post-mortem* examinations. I also treated five cases of assault.

As regards 1905 there was a slight epidemic of Typhoid Fever during the year. Eighteen cases of the disease occurred, nine of whom resided in the village and nine in the country. The source of infection may, as formerly, be attributed to contamination of the drinking water, most of the cases in the town having used well water on their erven instead of the fountain or town supply.

We were singularly free from the usual infantile epidemics, there being as far as I am aware no cases of Whooping Cough, Measles, or Mumps, either in the village or district.

Eight cases of Diphtheria, seven cases in the town and one in the country, with no deaths, occurred. All received treatment with Anti-Diphtheritic serum, and all contacts received prophylactic injections. With my assistance the Municipal Council drew up the following regulations for controlling the spread of the disease:—

(1) All members of infected households must remain under Quarantine for 10 days (*i.e.*, members of households and servants not to leave infected premises or admit others to same).

(2) All persons on infected premises should receive a preventative injection, failing which, the quarantine will be extended for the whole household to six weeks or longer.

(3) After patient's recovery, the quarantine flag will be removed on the direction of the Medical Officer, but the patient must for six weeks be kept on the premises, and should not sleep in the same bed, or come in contact with others, unless such others have received a preventative injection.

(4) Children from infected premises will be allowed to attend school ten days after removal of quarantine flag, provided such children have received a preventative injection.

(5) The head of the household will be held responsible for duly carrying out the above precautions, failing which, the Municipal Board will take such steps as are allowed by Law.

These regulations, which were posted on the door of all infected premises, acted most satisfactorily in preventing the dissemination of infection.

Vaccination.—Besides vaccinating in the village, I undertook five trips through the District, with the result that 472 persons presented themselves for vaccination, of which number I estimate that at least 75 per cent. proved successful.

During the year I performed fourteen *post-mortem* examinations, and attended three inquests. I also treated three cases of assault.

In a former report I advocated the treatment of Natives suffering from Syphilis in Hospital only, where they could be kept under proper supervision, and for some years, up to the end of 1904, I practically treated all Natives in Hospital with most gratifying results. Now, however, since the closing of the Contagious Diseases Hospital, I find that half the cases treated outdoor lapse from treatment, many of them still suffering from the disease in an infectious stage. Of thirty-one cases so treated during 1905 fifteen lapsed from treatment!

(a) The water supply of Britstown was formerly obtained from a fountain situated at the east end of the town, but this supply proving quite insufficient owing to drought for the needs of the village, the Municipality in 1904 opened up a strong well on the south side of the village, some 200 yards above the wall of the large dam. The houses throughout the village are supplied with this water by means of pipes connected with large zinc tanks, placed on the rand above the village, the water being raised to the same by means of a windmill. The ground in the immediate vicinity of the well was much fouled by the troops during the late war, and doubts were entertained as to its suitability for drinking purposes. A sample of this water was, therefore, forwarded for analysis to the Public Analyst, who reported favourably thereon, and it is to be hoped that it will turn out to be a good potable water. As the drought has, however, not yet completely broken, time only will show, after good rains have fallen, whether the new water supply is a satisfactory one or not.

(b) No sewers or drains exist.

(c) The disposal of night-soil, slop water, and refuse is carried out in a satisfactory manner by the Municipality.

(d) There is no overcrowding amongst the white inhabitants, and little amongst the Natives.

(e) Slaughter-houses, bakeries and food stores are kept in a proper manner.

(g) The housing of live-stock on the owners' erven at night occasionally gives rise to olfactory nuisances, but I anticipate no danger to the Public Health from same.

(h) The Native Location is under the control of the Municipality, is fairly clean, and situated about one mile from the village.

(i) The Town Cemetery is well kept.

(k) Of late years there has been steady improvement in all sanitary matters. The streets are clean, and the removal of night-soil, refuse, etc., is carried out very satisfactorily under the supervision of an inspector appointed by the Municipality.

(l) No Isolation Hospital exists.

(ii) SUB-DISTRICT OF DE AAR.

DR. F. C. FITZGERALD, ADDITIONAL DISTRICT SURGEON.

(a) There is little to note in the condition of the water-supply since my last half-yearly report, unless it is to mention that the long prevailing drought has at last broken, thereby strengthening the wells from which all the water is obtained. The rainfall for 1904 was 5.52 inches, and for 1905 12.31 inches. The water-supply is pure but lacking in quantity. In this connection I may mention that the Railway Department have the work in hand of a new water-supply from the farm Carolus Poort, seven miles distant—a plentiful supply, not only for domestic purposes but also for engine purposes. This is being brought in in 6-in. steel pipes.

With regard to the Municipal Bye-laws and Regulations, which I mentioned in my last report as being framed, these have now received the sanction of His Excellency the Governor, and amongst other appointments the Municipality have appointed a Sanitary Inspector.

De Aar is divided into two portions for local administrative purposes, the Railway Camp in charge of Dr. C. Symington, R.M.O., for health and sanitation, and the Municipal area, where a Health Officer has not yet been appointed. The sanitary supervision of the Railway Camp is all that could be desired, but that of the Municipal area needs much improvement. I shall treat of each portion separately where necessary.

(b) Sewerage and Drainage.—There is no sewerage or drainage system at De Aar. The sluit into which surface water flows when in quantity is kept freely open and clean.

There has been very little water to drain away, as bath water is usually allowed to run into gardens and other slop-water from household is removed daily.

(c) The Railway Department have a very complete system of sanitation, by which all night-soil is removed nightly and buried. Slop-water and refuse are also removed daily.

In the Municipal area the night-soil, etc., has been removed by a private contractor once or twice a week when necessary, and has been done more or less satisfactorily.

The whole of the above night-soil, slop-water, etc., is removed to a spacious and very suitable dumping-ground situated beyond the kopjes to the east of the town, about a mile distant, and there satisfactorily dealt with.

The Municipal Council have now completed arrangements by which all this work will be performed by the Council from 1st of March, 1906.

(d) So far as I know there are no overcrowded dwellings, but I have reason to think that some are not quite habitable—for instance there are several low, small wood and iron dwellings, occupied by large families. It is high time that these were replaced by dwellings more in accordance with modern ideas.

Amongst the Natives, some of their dwellings would be overcrowded if it were not that they are so well ventilated by faulty construction.

(e) There are no slaughter-houses at De Aar, slaughtering is carried out in the outskirts of the town. Arrangements are now being made by the Municipality by which all slaughtering must be done some distance from the town.

There are now only two butcheries in De Aar, both are well kept.

There is only one bakery at De Aar; this has café and boarding-house attached, and is well kept.

Storekeeping and wagonmaking are the only trades carried on here; these call for no special comment.

(f) There is no fault to be found with the sale, storage and preparation of human food. Ice is obtained daily, many articles being preserved by its use, and it also enables the inhabitants to obtain fresh fish regularly.

(g) Cattle are kept in one place in the centre of the town by the dairy-keeper. They run on the commonage by day and are kept in a kraal by night.

Swine are kept in two kraals on the outskirts of the town.

Horses, mules, donkeys, and dogs, are also kept in the town.

The stables are well looked after, are now healthy and well ventilated. An outbreak of Glanders occurred here in November, 1905, three centres being affected; six animals found to be affected with Glanders were destroyed. The stables were quarantined, and no further case occurred.

(h) There is one location here, and I cannot report any improvement since my last report; however, I hope for early improvement as the Municipality have now a part proprietors' interest in same, and better things are to happen. There are still no latrines, and squatting continues and has been frequently reported on. I understand the Council are now erecting latrines. Good order is maintained in the location.

A collection of Native houses in the north end of the township can be called little else than a location. The same unsatisfactory condition of affairs existed here towards the end of last year, until the Council altered matters.

(i) There is one cemetery. This is owned and controlled by the Railway Department. Everything is very neat and in good order. There is a Native burial-ground, under no control, and is very untidy. This has not been taken in hand since my last report.

(k) Any nuisances found to exist are promptly removed or otherwise dealt with.

(l) No special hospital exists here for the treatment of infectious diseases. There is a hospital belonging to the Railway Department; this has twelve beds, and is a general hospital. When a case of infectious disease occurs, special hospital or tent accommodation has to be provided. This sometimes causes a delay in isolating cases.

(m) There were some twenty cases of Enteric Fever in De Aar and district

during 1904, with five deaths, and there were six cases in 1905, with one death. So far as can be ascertained none of these cases originated in De Aar, but were brought into De Aar from other districts where there was an outbreak, such as Hanover and Philipstown. Most of these cases were treated in the Railway Hospital, the remainder in their own homes; in no case was infection spread.

A pretty sharp outbreak of Whooping Cough occurred in 1904, affecting a large number of children, but as they did not all come under treatment, it was not possible to estimate their numbers. There were thirteen deaths from this disease in 1904. The school was closed for over a month.

A few cases occurred in 1905, but they were very mild; there were two fatal cases in 1905.

There were no cases of Diphtheria, Measles, or Small-pox in 1904.

There were no cases of Diphtheria or Measles in 1905. One case of Small-pox occurred at Swart Koppies, six miles from De Aar, in June, 1905, in a Native pre-vaccinated. He presumably contracted the disease which was then raging in Kimberley, from a Native boy, who had arrived from Kimberley a few days before, and who had stayed with him. The case was under the direction of the Divisional Council, Britstown; no further case occurred, and the patient recovered. Two contacts were vaccinated and isolated. The case under note had been successfully vaccinated about six years previously.

A vaccination tour was undertaken in the early part of 1904, eight centres being visited and 236 vaccinations and re-vaccinations being performed at a total cost of £23 0s. 6d. I have reason to think quite 95 per cent. were successful.

Plague.—No case of Plague occurred here, and no steps were taken for the extermination of rodents.

Three cases of Scurvy were treated here in December, 1905. They were caused by improper feeding on the Geduld Mine, in the Transvaal, from which they had been discharged a few days before; they recovered speedily.

There was an average of six paupers on relief in the years 1904 and 1905. Sick and infirm paupers require special treatment and allowances, such as meat, coffee, sugar, etc., which are always allowed them.

No Hospital accommodation exists for the treatment of acute illness in sick paupers, they have to be taken to the gaol if there is accommodation and treated there.

Contagious Diseases.—Fifteen cases were under treatment in 1904, and nine cases in 1905. The most unsatisfactory part of the treatment of this disease is the frequency and the number of patients lapsing from treatment. Only one primary case in 1904 and two in 1905 came under treatment.

Vital Statistics:

Births Registered: In 1904, European, 34; Coloured, 72. In 1905, European, 29; Coloured, 77.

Deaths Registered: In 1904, European, 20; Coloured, 130. In 1905, European, 7; Coloured, 42.

Deaths under One Year: In 1904, European, 2; Coloured, 43. In 1905, European, 2; Coloured, 14.

Population of De Aar: European, 1,074; Coloured, 2,197; All Races, 3,271.

The following are the causes of Death during 1904 and 1905:—

1904: Diarrhœa, 5; Pneumonia, 32; Burns, 1; Carcinoma, 2; Phthisis, 25; Dysentery, 8; Dropsy, 1; Valvular Disease of Heart, 5; Convulsions, 5; Bronchitis, 10; Gastro-Enteritis, 9; Nephritis, 3; Pleurisy, 2; Senility, 2; Marasmus, 4; Ascites, 1; Hæmorrhage, 2; Enteric Fever, 5; Whooping Cough, 13; Malarial Fever, 1; Premature Birth, 4; Syncope, 1; Apoplexy, 1; Run over by train, 1; Croup, 1; Scurvy, 1; Peritonitis, 1; Influenza, 1; Cirrhosis of Liver, 2; Congenital Asthenia, 1; total, 150.

1905: Whooping Cough, 2; Gastro-Enteritis, 5; Pneumonia, 10; Enteric Fever, 1; Convulsions, 2; Diarrhœa, 2; Dysentery, 2; Phthisis, 13; Senility, 2; Abscess, 1; Paralysis, 2; Bronchitis, 1; Marasmus, 1; Cancer, 1; Cystitis, 1; Premature Birth, 1; Run over by train, 1; Valvular Disease of Heart, 1; total, 49.

14. CALEDON.

DR. A. J. ALBERTYN, DISTRICT SURGEON.

(a) The town of Caledon is supplied with water obtained from springs in the Swarteberg Mountains. The water is good, pure and palatable both at source and

delivery, and the supply so far has been adequate for the requirements of the inhabitants. There is virtually nothing tending to cause its pollution at its origin, during transit or delivery. The water is taken and stored in a covered reservoir at its origin, and is then led in pipes connected with tanks or distributed to the various houses for domestic use.

The water for irrigation purposes is also obtained from the same source, and is stored in an open reservoir holding about 6,000,000 gallons; from the reservoir it is led in open furrows through the town.

(b) There is very little drainage in the town of Caledon, except that afforded by Nature.

(c) The system in vogue for the removal of night-soil is the bucket system. The night-soil is deposited in suitable pits dug for the purpose about two miles from the town.

The slop-water is also disposed of in the same way.

Household and other refuse are collected and deposited about half a mile from the town on the north side. This is not a suitable place, as the north wind prevails in Caledon, which blows directly across the dumping-ground towards the town. An improvement has lately been effected in the way of burning the refuse immediately on arrival at the dumping-ground.

(d) There is not much overcrowding of dwellings, nor any dwellings unfit for human habitation.

(e) The management of butcheries, bakeries and other trades affecting health is very satisfactory. An improvement has taken place with regard to slaughter-houses. There are three, which are located some distance from the town in a healthy area.

(f) The sale, storage and preparation of human food are satisfactorily carried out.

(g) The keeping of cattle is satisfactory. I however notice that although there is a suitable place set apart outside the village for the keeping of swine, some occupants persist in hiding pigs in their backyards, a practice much to be deprecated, and one which I have repeatedly brought before the notice of the Municipality.

(h) Genadendal and Berea are the only Native Locations in this district. They are about twenty miles distant. The Moravian Mission Society controls these, and has already attained a high state of efficiency in regulating cleanliness and general sanitation. I have it on good authority that some influential coloured people, no doubt instigated by unscrupulous persons, are disputing the powers of the missionaries, thus causing a great deal of dissatisfaction and unrest generally amongst the inhabitants.

(i) Two cemeteries exist at Caledon, being well below the town. The soil is sandy and the drainage excellent. The vault system unfortunately is still in vogue. I have repeatedly advised the Council to abolish such a pernicious system of concealing the dead, but with no apparent success.

(k) Nuisances generally are abated by means of prompt action on the part of the police.

(l) There is no hospital accommodation for the isolation and treatment of infectious disease in the district. We had an apology for a hospital in the way of a lazaretto for syphilitics, but owing to retrenchment it was thought fit to dispense with the patients—a great pity—as now there are a goodly number of syphilitic patients scattered throughout the district spreading the disease, notwithstanding the home treatment.

(m) Isolated cases of Typhoid Fever and Diphtheria have come under my notice, but the diseases have very considerably abated both in the town and district. There has been no epidemic of Measles.

No epidemics of Small-pox were prevalent or are in existence. Vaccination has been generally done throughout the District. I am, however, unable to state definitely with what amount of success, as a second visit is not permitted. I believe the success has been fair.

There has been no Scurvy or Epidemic Pneumonia in the District.

15. CALVINIA.

DR. J. SMUTS, DISTRICT SURGEON.

(a) No improvement since my last report.

(b) There is no system of sewerage or drainage.

(c) The collection and disposal of night-soil and household refuse is carried out in a satisfactory manner. No provision is made for the collection and disposal of slop-water.

(d)—(k) No change.

(l) There is a Contagious Diseases Hospital, consisting of a single room.

(m) I am not able to give all the information asked for, as cases of infectious disease occurring outside the village area are not notified.

(1) The outbreak of Diphtheria that commenced towards the end of 1902, and continued during 1903, caused eight deaths in 1904.

(2) Typhoid caused one death in 1904, and four in 1905.

(3) There was a slight outbreak of Measles in one part of the District in 1905. It caused one death.

16. CAPE.

There is no District Surgeon for Cape Town. The reports of the Medical Officers of Health for the Municipalities of Cape Town and Green Point and Sea Point will be found under Part III., among the reports of Local Authorities.

17. CARNARVON.

DR. LEOPOLD KATZ, DISTRICT SURGEON.

Since my last report very little calling for special attention has occurred. In spite of the drought, the scarcity of water, and the scanty supply of fresh milk and green vegetables, the general health of the village and district has been good. There were no serious epidemics of infectious disease during the two years under review. During 1904 a few cases of Typhoid Fever and a somewhat higher number of cases of Diphtheria and Influenza occurred, while during both 1904 and 1905 several cases of Small-pox were dealt with.

The year 1905 was exceptional on account of the severe drought experienced in the District, the total rainfall amounting only to 2.92 inches, and as during the latter half of 1904 only .74 inches of rain were registered, it will be seen that our total rainfall for the eighteen months was 3.66 inches, a rather sad record. For the sake of comparison I append below a return showing the rainfall at Carnarvon during the last six years:—

1900, 11.47; 1901, 11.67; 1902, 6.57; 1903, 2.45; 1904, 4.98; 1905, 2.92.

(a) No change occurred in regard to the water-supply of the village during 1904, the chief feature of the year being the drought, which was especially bad during the last six months thereof, when only .74 inches out of a total of 4.98 inches of rain during the year were registered. During 1905 our water-supply was augmented by the erection of an aer-motor by the Municipality for the benefit of the public. The water, however, is greatly lacking in quantity, the well not having been sunk sufficiently deep. The quality is also not of the best. Both of these mistakes could have been avoided by consulting an expert before incurring the expenditure. Another mistake is that the water for the animals, for which a trough has been made, is too close to the well, and although the mason work is done thoroughly, the pollution of the water can hardly be avoided.

Most of the private wells in the village gave out totally during the year, the quality of the water, which is of a brackish character, and through unusual ingredients of a yellowish, greenish or blackish hue, being extremely bad. The water of the Magistracy, for instance, could only be used for kitchen purposes. Both dams of the village also totally dried up.

(b), (c), (d), (e), (f), (g), (h), and (i) No Change.

(k) Certificated nurses and midwives are badly required.

(l) There is no accommodation for the isolation and treatment of Infectious Disease. There is a Contagious Diseases Hospital, which has not been used during the period under review.

(m) To prevent the spread of Infectious Disease the precautions advised by the Local Authorities are carried out, but badly. The ominous red flag does not prevent people from coming and going into the infected area. Although in most Infectious Diseases isolation of the patients and disinfection of the dwelling-houses are quite satisfactory measures, if properly carried out, in Diphtheria the only

safeguard is inoculation of all contact cases, as I have had ample opportunity to prove. The same steps should be taken in preventing the spread of Small-pox, *i.e.*, compulsory vaccination of all contact cases, as well as of the affected people.

During 1904 there were two outbreaks of Small-pox in the Location amongst the Coloured population. The first outbreak started on 1st January and ended on 6th February; the first case of the second epidemic occurred on 2nd September, and the cases were subsequently discharged on the 19th idem. All the cases recovered. In both instances it was impossible to trace the source of infection. The Local Authority managed both epidemics quite well. The disease was confined to Coloured people, there being one male and four females in the first and two males and two females in the second, all unvaccinated cases. Isolation, surveillance, and vaccination were properly carried out.

Five hundred and fifteen vaccinations were performed by the District Surgeon during the year. A good many persons were vaccinated by the Police. There are still a good many people, however, who disobey the Law, and refuse to be vaccinated.

A good many cases of Diphtheria occurred in the District, as well as in the village, without any distinction of race, sex, or age. Patients are usually treated with antitoxin, and appreciate the great value of the remedy. There were also some cases of Typhoid Fever of a mild form in the village, the source of infection of which could not be found. Influenza was rather prevalent towards the end of the year.

155 births and 144 deaths were registered; of the latter, 42 cases were children under one year. Fourteen deaths from Tubercular Diseases occurred, being almost 10 per cent. of the total number of deaths.

During 1905 there were outbreaks of Small-pox on the farms "Markt," "Groot" and "Klein Toeslaan," and "Maketanspoort," in the months of March, April, and May. The disease was conveyed to the inhabitants of "Markt" while attending a wedding dance at Rassiedam, in the Division of Prieska, where persons affected with Small-pox are said to have been present. Nine cases in all (Europeans), one of whom, with the exception of one doubtful one, had been previously vaccinated, were affected. The first case happened on 11th March and the last on 4th May. I know that all cases recovered, but cannot give any details of the course of the illness, having seen the patients but once. The Divisional Council managed the surveillance and isolation in a rather off-hand manner. One affected person, for instance, at "Makatanspoort," journeying about the District, got a friendly warning from the Secretary to stay at home, although the District Surgeon and the Police had given the strictest order to the farmer with regard to the spreading of the disease.

Of other Infectious Diseases, I have to report a number of cases of Diphtheria and Typhoid Fever, and also of Scarlet Fever. There happened quite a good number of cases of a mild type of the last-named sickness in the village, as well as in the District. There were no cases of Measles.

Syphilis is decreasing in our District, but other contagious diseases are becoming more frequent than in former years. It is possible that in the Native labourers working on the new Railway line the transferable source may be found.

Tuberculosis is on an increasing scale. If I take the population of the District of Carnarvon as over 5,500, I obtain the following rates:—

Year.	Deaths of all causes.	Per 1,000.	Deaths from Tuberculosis.	Per cent. of all deaths from Tuberculosis.
1903	160	29·0	9	5%
1904	144	26·2	14	10%
1905	91	16·5	14	15·4%

The above figures give sufficient evidence of the increasing mortality caused by Tuberculosis. The morbidity particularly amongst the Natives is still much higher. I need not dwell upon the well-established fact that the Coloured races show a greater disposition to tubercular diseases than Europeans; the returns of all Colonial villages have proved it sufficiently. There are a good many circumstances which render their lives more hazardous than those of White people. Utmost poverty, want of wholesome and proper food, bad dwelling-houses, abuse of liquors, filth and dirt, and last, but not least, superstition, are the chief factors which counteract the advantages of living in rural districts. Three classes of houses exist amongst Coloured people. The poorest of the poor live in huts made of dry bushes and covered with old rags, which do not even allow the inhabitants thereof to stand erect in these so-called "houses." The next class occupy single or two-roomed houses, usually built of clay lumps or bricks of the worst quality, the rooms being

very small, with one or two small holes which serve as windows, which are, however, very seldom opened. The floors of the houses are of clay, very often covered with filth. Sometimes dogs, cats, fowls, or a lean pig share the living room with the human beings. There exists a very limited number of better-situated Coloured people, who own well-lighted and ventilated rooms—in short, houses which would satisfy modern hygiene demands. As regards food, these people are even worse off than in the matter of housing. The chief nourishing factor consists of starchy elements, namely, meal or bread, mealies, and rice. Meat and vegetables are, owing to the bad times, considered delicacies. Fresh milk is conspicuous by its absence. As beverages, bad water and worse coffee are consumed in large quantities. Luckily, the abuse of liquor has greatly diminished through the most laudable efforts of the Missionary of the Rhenish Society.

All these circumstances, upon which I could enlarge a great deal, help to endanger the lives of the Coloured people. As soon as the phthisical process has established its presence in one of the members of a family, very little can be expected from the use of drugs and medicines, as long as the unhygienic and undietetic circumstances remain the same as above related, which, I might point out, are likewise a source of danger to the White population, in view of the fact that Coloured girls are employed as servants, cooks, nurses, and washerwomen by the European population, with whom, especially the children, they come into daily contact.

I would also emphasise the great mortality occurring amongst children under one year of age, the Coloured people here again being in a great preponderance. So far I have been unable to ascertain whether the neglect or bad hand-feeding of the children, or any other circumstances, are responsible for the high death-rate amongst infants.

I append hereto a table illustrating the above for the last two years, which is of the greatest interest.

Year.	Total number of deaths.	No. of Deaths in Infants.	Death rate, per cent.
1904	144	42	30
1905	91	24	26

18. CATHCART.

DR. G. WHITESIDE ROBERTSON, DISTRICT SURGEON.

(a) The mountain stream from which Cathcart receives its water-supply has been completely fenced in, and as the mountain is used for cattle grazing one very obvious source of pollution has been removed. The top of the walls of the reservoirs has been covered with broken glass, and the water is thus protected from possible pollution by mischievous boys.

(b) There is no system of sewerage and drainage.

(c) The pail system is in vogue and a tri-weekly service has been established.

There are certain persons in the village who let outside rooms on their property to Natives, and for these there is no sanitary provision made. As there are a number of children occupying some of these quarters it is almost certain that the strictest precaution against soil pollution are not observed; but the Sanitary Inspector has never been able to detect any contamination.

The system of allowing Natives who are not employed by the proprietor to reside on these premises is a very objectionable one, and one from which great danger to the public health might arise. From a social point of view, the practice is also repugnant, but apparently the owners are legally within their rights, and so long as these Native quarters cannot be designated a "nuisance" and injurious to the public health nothing can be done.

The Municipality is, however, considering ways and means of abolishing the practice, and by the imposition of an additional water rate this might easily be effected.

(d) No proper supervision exists over the houses at the foot of the village owned and occupied by Natives, and overcrowding in some of these may exist from time to time. No serious illness, however, has occurred. There are no dwellings that can be characterised as unfit for human habitation.

(e) An abattoir has been erected and the conditions under which slaughtering is now carried out are a great advance on what obtained before its establishment. The abattoir is under the control of the Municipality.

The butcheries and bakeries are kept in a satisfactory condition.

There are no proper dairies in the village, but the persons who distribute milk to the community are, fortunately, clean and respectable, and as far as I can ascertain a certain amount of care is exercised by them in scalding the milk pails and in generally supervising those entrusted with the handling of milk. In any case, a large number of people use nothing but boiled milk.

(f) The stores are all well kept and no food unfit for human consumption has been detected.

(g) This does not constitute a nuisance.

(h) The location is fairly clean and orderly.

(i) A site for a new cemetery has been chosen at some distance from the village, although the existing cemetery is not yet full. The present Native cemetery is, however, absolutely unfit for further burials.

(k) Nuisances are promptly combatted.

(l) No Hospital accommodation exists.

(m) During the period July 1st, 1904, to December 31st, 1905, the infectious diseases included Small-pox, Diphtheria, Enteric Fever, Scarlet Fever, Measles and Chicken-pox. Four cases of Small-pox occurred at the Cathcart Native Location. The patients were all Kafirs.

The first case was discovered on November 18th, 1904. Another case occurred on November 24th, the third on November 27th, and the last on December 16th. The last case was discharged on 23rd January, 1905.

The source was difficult to trace; but the infection appeared to have been conveyed by a Native Policeman from St. Marks.

The patients and all the contacts were rigorously isolated in tents and vaccination and re-vaccination were extensively carried out. No deaths occurred.

The Municipality took prompt action, and in addition to wholesale vaccination by the District Surgeon, the Native Constable made a daily visit to each hut with the view of discovering any cases of suspicious illness.

As there were numerous contacts, guards had to be employed day and night during the whole period of quarantine, and the contacts had to be provided with fuel, food, etc. The total cost incurred in dealing with the outbreak was £79 4s. 9d., of which the Municipality paid the larger share.

A case of Small-pox in a European child (unvaccinated) occurred at a farm near Tylden in October, 1905. The case was discovered on the 19th October, after nine days' illness, and was discharged on 16th November. Every precaution was taken, and vaccination, disinfection, etc., were carried out at the farmer's own expense.

Seven cases of Diphtheria occurred in the village and District, with two deaths; six cases of Enteric, with one death; and five cases of Scarlet Fever, with no deaths. Three of the cases of Diphtheria occurred in one family on a farm about twenty miles from Cathcart, the first case which proved fatal being mistaken for an ordinary sore throat, and not receiving medical attendance till too late. The cases of Enteric Fever and Scarlet Fever occurred in different places and had no common source.

During the spring months of 1905 an epidemic of Measles occurred in the village and District. The disease was characterised by specially high temperatures, an intense maculo-papular rash and frequent throat affections. Serious chest complaints were fortunately few and the mortality was low. Many adults were attacked.

19. CERES.

DR. G. C. MUNNIK, DISTRICT SURGEON.

(a) The water-supply is derived from mountain springs and delivered both by pipes and open furrow, the latter for irrigation purposes mainly. It is adequate and of pure quality.

(b) Nil.

(c) Night-soil is collected in pails, and systematically removed by Municipal wagon, and disposed of by burial outside the town.

This system is not carried out in the Native Locations, where the night-soil is still being buried in the neighbourhood of the huts. Slop-water in most cases is allowed to dry up in the yard.

Household and other refuse is carried away by Municipal cart.

(d) Overcrowded dwellings and dwellings unfit for human habitation are unimportant in country villages.

(e) Slaughter-houses, butcheries, bakeries, and dairies are well conducted so far.

(f) and (g) Nil.

(h) The order and cleanliness of the Native Locations are fair.

(i) The cemeteries and burial-grounds give no offence by their situation and management.

(k) Nil.

(l) A lazaretto, to accommodate about twelve cases, belonging to Government, is the only hospital accommodation in this area.

(m) With the exception of an epidemic of Mumps, no infectious diseases worth mentioning prevailed. An occasional case of mild Diphtheria and Enteric were notified, the origin of the latter being obscure.

Three Sporadic Puerperal Fever cases were recorded, and a few of Pneumonia. About three persons were in receipt of pauper relief from Government.

One case of Syphilis was treated at home.

No public vaccination has been done for three years.

20. CLANWILLIAM.

DR. ALFRED A. HAYES, DISTRICT SURGEON.

(a) The water-supply is by means of an open furrow, which is taken from the Jan Dissel's River, about three miles south of Clanwilliam. The stream is large and of considerable velocity, the water clear, and pleasant tasting, very soft, from a complete absence of lime salts in solution. It flows over a bed of white sand, and at its source is pure and good. During transit, however, it is liable to serious pollutions. In the upper part of its course cattle and other animals, both wild and domestic, have perfectly unhindered access to it, and it is no uncommon sight to see the pigs disporting themselves in it and endeavouring to cool their bodies in the warm summer weather. Horses and cows frequently cross it, and make deposits which are certainly not beneficial to health. In the lower part of its course an attempt has been made to obviate these objectionable features by the erection of a wire fence for about a mile of its course, but as this fence has become broken down in several places, it is neither useful nor ornamental. On delivery the pollutions become enormously increased, and are much more serious in their character. Clanwilliam lies in a hollow basin, with hills sloping towards it on all sides, and on the slope of one of these hills, directly above the water-furrow, is the principal Native Location, whence all drainage must proceed towards the water. This in itself is serious, but, as Shakespeare says, "Worse remains behind," for in its passage through the village, where it lies below the level of the street, during rainy weather, street sweepings, drainage from the Gaol, and all manner of abominations are swept into it, and the inhabitants must send long distances to fetch drinkable water, if they have not provided themselves with a Pasteur filter.

We lately heard a great deal about a scheme to bring water in pipes from the river, but it appears to have fallen through, principally owing, I believe, to financial difficulties.

In my opinion, however, much can be done at a reasonable outlay to remedy deficiencies without unnecessarily burdening the ratepayers. I should suggest that an embankment of about one foot in height should be erected along the whole course of the water-furrow, which passes through the village, and at intervals proper drains can be made over the furrow, which, if kept clean, will be able to remove all the storm-waters, and thus save contamination either from the streets or Native Location. Further, that the portion which is liable to be trespassed on by animals should be carefully fenced in, and that a pump should be supplied for filling the trough where the horses drink. At present it is only the velocity of the stream and the frequent exchange of water that saves the village from severe attacks of Enteric Fever.

(b) Absolutely none. Water from the bath-houses is drained by the people who possess them in whatever manner suits their fancy.

(c) Night-soil, slop-water, household and other refuse are removed by a cart in the employ of the Town Council, and deposited at a safe distance. Night-soil is buried. The pail system is in universal use, the pails being cleaned and disinfected three times a week. This system works fairly satisfactorily.

(d) I know of none.

(e) Slaughtering is done in the open air at a safe distance from any habitation. Butcheries and bakeries are clean and well kept.

There are no public dairies.

(f) Satisfactory.

(g) Cattle mostly run on the commonage during the day and return to village at night, where they are kept in the gardens. I have heard of no complaints with regard to them. Swine are generally kept in styes, but those in the Native Location appear to have a free run, often making piratical raids on the gardens during the night, where evidence of their presence can be detected in the morning in the shape of half-demolished watermelons, melons, and pumpkins.

(h) There are two locations under the control of the Town Council. The larger of the two is practically in the village, and from its position, as previously pointed out, is most objectionable, and is a real source of danger to the water-supply.

The other is a small collection of huts at a safe distance from the village on a hill sloping towards the Oliphants River.

I have repeatedly drawn the attention of the Town Council to the objectionable features of the larger locations, hitherto without result. It is, however, generally well kept and fairly clean.

(i) The cemeteries at present in existence are in many ways objectionable, but a genuine endeavour to provide a new and satisfactory site for a public cemetery is now being made.

The position chosen is in my mind the only suitable place in Clanwilliam which is not on private property. It is no doubt unfortunate that choice of site is limited, but of these available the position selected by the Council is in my opinion the only one free from objection.

(k) Beyond what has been indicated, nothing has been done.

(l) None. The only Hospital is that under the Contagious Diseases Act, and does a useful work in limiting the spread of Syphilis. As a result of its operation, the village of Clanwilliam is now, as far as I know, quite free from disease. Lambert's Bay at present supplying all the cases. I have here to thank the Police for the excellent manner in which they have co-operated with me in my efforts to stamp out the disease.

(m) A few cases of Enteric Fever have occurred; two at Welbedacht about November, 1905. No deaths. Also several at Grootkloof, near the Cedar Mountains, occurring in succession, and confined to one family, commencing also in November. Here there were two deaths.

The Welbedacht cases occurred after bathing in the small river which flows near the farm; the disease may thus have been water-borne. At Grootkloof I was unable to trace the source of contagion.

Scarlet Fever broke out at Zandberg about June, 1904. There were three deaths, and the disease did not spread from the farm. Only Europeans were affected.

The cases of Enteric Fever at Grootkloof were all Coloured children; those at Welbedacht Europeans. No definite steps could be taken for isolation of the cases, but I directed personally the course that should be pursued, and I have every reason to believe that my orders were carried out.

There have been no outbreaks either of Small-pox or Measles in the last two years.

Vaccination was carried out at various centres in 1905. The amount of success is unknown, as the distances from Clanwilliam are too great to admit of inspection, and in Clanwilliam itself not one of the Natives returned to report the result, in spite of my orders that this should be done.

It is so many years since there has been an outbreak of Small-pox in Clanwilliam that people have grown careless, and no doubt there have been in the country almost insuperable difficulties in effectively carrying out the vaccination law.

In addition to the matters here discussed under the various headings, I should like to draw attention to the decided increase of tubercular disease among the Coloured people in Clanwilliam.

I have not the smallest doubt that the principal cause of its increase is through contagion, and it seems almost a hopeless task to try and impress this upon the minds of the public.

While an outbreak of Scarlet Fever or Small-pox causes an unreasoning panic, Phthisis, which is a thousand times more deadly than either of these diseases, is allowed to continue its course unchecked, while a certain amount of continued precaution is all that it needed to limit its spread by contagion. I think it is now a recognised fact that much may be done to limit the dissemination of this scourge, and it argues a vast amount of apathy on the part of the public that people should

quietly sit down and see one after another of their friends and relatives cut off by a lingering and distressing disease, and never endeavour by any effort to check its ravages.

21. COLESBERG.

DR. R. K. TAIT, DISTRICT SURGEON.

The town of Colesberg is situated in a kloof, surrounded by mountains on the north, east and west. It slopes down from the north to south, and a large sluic runs through the town, and carries away flood-water.

(a) The water-supply is good and sufficient. Hydrants are placed at different parts of the town for the use of the inhabitants.

(b) The sluic running through the town takes away any surplus rain-water. There is no sewerage or draining scheme in use.

(c) Night-soil.—This was formerly taken away by a contractor, but is now done by the Local Authority, which is a great improvement. Slop-water and other refuse are also removed by the Local Authority.

(d) There is no overcrowding nor any dwelling unfit for human habitation.

(e) The slaughter-houses are clean and in good order and 300 yards from town. The butcheries, bakeries, etc., are kept in thorough sanitary order.

(f) The sale, storage and preparation of human food are good. I periodically examine all Natives who work therein.

(g) Cattle and other animals are kept in kraals outside the town.

(h) The location is thoroughly clean and all sanitary arrangements well looked after.

(i) There are four cemeteries and burial grounds, viz., the Town, Military, Burger and Native cemeteries.

(k) No nuisances.

(l) There is a Lazaretto, three miles out of town. It is a zinc building of two rooms. Can accommodate five patients, is splendidly situated, has an excellent water-supply, and belongs to the Local Authority.

(m) Enteric and Diphtheria.—The District has been free from these diseases. A few cases of Cape Malarial Fever occurred.

Measles.—Only one case in town and one in the District. They were isolated and the disease stamped out. The case in town was the child of a Doctor in Colesberg, who had the case in the country. The infection came from Hope Town, where they had been visiting.

Small-pox.—One case came from Rouxville, O.R.C.; was detected at once and removed to a Lazaretto. The disease was stamped out, and the case discharged cured, March, 1904.

22. CRADOCK.

(i) CRADOCK.

DR. P. C. DE WET, DISTRICT SURGEON.

(a) The water-supply for drinking purposes is derived from springs at Holstuisbaakens—eight miles distant from the town. The supply has considerably decreased during the last few years, and whereas it formerly reached as high as 150,000 gallons per diem, it has now fallen to 50,000 gallons.

The consequence is the main is turned off at about eleven a.m., and only about four to five hours flow allowed to the householders. The Town Council were compelled to cut off the spring water from the location, and a well was bored on the river banks, from which water was pumped into two large tanks on the north extremity of the location. This water was analysed by Dr. Hahn and myself before it was decided to use it for Natives; shortly after it was laid on, during the months of December and January, the Coloured people complained of the water, and stated that it was not fit for drinking purposes. I examined several samples from the tanks and the well, and decided that the latter should be cleaned out as the water then showed traces of vegetable matter, whereas the previous examina-

tions had showed it to be pure. This was done, and a later analysis proved that it was quite good for drinking purposes; the Natives, however, remained dissatisfied and still grumble at being deprived of their share of the town water.

(b) Sewerage and Drainage.—No change since last report.

(c) Disposal of Night-soil, etc.—The dual system of sanitary tubs is in vogue, changed weekly and bi-weekly; while the one tub is in use the other is cleansed, carbolised and aired. Slop-water and refuse are removed by tank and “Scotch” carts.

(d) Crowded Dwellings, etc.—Some of the rooms in the back yards of town houses occupied by Natives are crowded, and the shops with rooms attached, inhabited by Indians, also need careful supervision.

(e) Slaughter-houses, etc.—The abattoirs are fairly managed, but, as previously pointed out, no water is laid on, consequently the floors and walls are not flushed as they should be; the smell, now noticeable, would soon be got rid of if a proper water-supply were provided.

Butcheries, bakeries, dairies, etc., are also fairly well conducted. I am still of opinion that dairies should be licensed and subjected to regular inspection. I consider the indiscriminate sale of milk dangerous to the public health.

(f) Sale and Storage of Human Food.—Meat is sold on the market as well as by butchers. I have only discovered measly pork on one occasion; this pork was sent in by a farmer, who was notified of the fact immediately, and warned of the danger of the sale of infected meat. Vegetables and fruit are provided to most householders by Indian and Chinese hawkers.

(g) Keeping of Cattle, Swine, etc.—A few dairies are to be found in the town; approximately about half the quantity of milk needed for town consumption is sent in from the neighbouring farms. Few, if any, pigstyes are kept by householders.

(h) Cleanliness and General Sanitation of Native Location.—The location, considering the number of Natives, and at times the number of persons resident in one hut, is clean, and I should like to see the north-west portion of the location opened up; it requires more cross roads and more space allotted to each hut. Under present circumstances inspection is a matter of days instead of hours. I have always looked upon the Native Location as a possible source of danger to the European population in the absence of properly regulated system of reports of all cases of illness amongst Coloured people and after such reports thorough investigation in the first instance, by an intelligent Location Inspector, and later, if necessary, by the local Health Officer. At present the whole business of reports is perfunctory and practically useless. It is quite possible for a Native to be suffering from Enteric—for example—and for his friends to dispose of the excreta in the nearest sluit, without being discovered for days and even weeks.

(i) Cemeteries.—All the European cemeteries are situated on the north end of the town; there is no danger of infection or pollution of water from this source.

(k) Abatement of Nuisances, etc.—This work is under the control of the Town Ranger, an official appointed and paid by the Town Council. If any insanitary spot comes under his observation, he is expected to report same to the local Medical Officer of Health. Cases of this sort are very rarely brought up before the Resident Magistrate.

(l) Hospital Accommodation for Infectious Disease.—The Contagious Diseases Hospital was closed in 1905 by order of the Government. Syphilis appears to have marked increased recently, whether as a sequel to the closure, or not, I am unable to say. It does not seem to me possible to undertake the treatment of Syphilitic Natives as out-patients. They are careless about taking medicine, neglect cleanliness, and, worst of all, disregard the District Surgeon's most stringent injunctions as regards the danger of contact.

Segregation, and most stringent segregation, is to my mind the only possible means of stamping out, or even checking the spread of, this disease. On the East Coast, I was informed, that whole tribes of Natives were infected with Syphilis, and it does not need a wise prophet to foresee a similar fate awaiting our Natives even in the near future, while perfunctory and individual treatment is considered sufficient recognition of our duty to the Coloured people in this respect.

My experience, during the last fifteen years, has taught me the uselessness of advising a Native and pointing out to him the danger of infection; he, like his European neighbour, is disposed to consider his own comfort of vastly more importance to himself than the well-being of the rest of the community.

(m) Only nine cases of Enteric were reported during the year 1905; four of this number having occurred in January. Diphtheria was prevalent in the District in the beginning of last year and the end of 1904, but, fortunately, less than

half a dozen cases were discovered in the town. No case of Small-pox was seen.

Measles was very prevalent during the months of March, April, and May; the death-rate was considerably increased amongst Native children at that time, not so markedly amongst the European.

Phthisis amongst Natives is more prevalent of late years than formerly. Those infected usually begin to show signs of Tuberculosis at about the age of eighteen to twenty years, and in the vast majority of cases the progress of the disease is extremely rapid—often only lasting twelve months from the initial stage to the finish.

(ii) SUB-DISTRICT OF MARAISBURG.

DR. N. POLLOCK, ADDITIONAL DISTRICT SURGEON.

(a) The Municipality have lately erected a windmill in connection with the pump situated in the Market Square, and are at present engaged in building a tank, into which the water will be pumped, and which, when completed, will be the principal source from whence the town will obtain its drinking water. This water was analysed some time ago, and was found to be a good potable water, though rather hard and brackish. It would be well that the public were to consider that the water obtained from deep bore-holes has little chance of being contaminated by the impure surface water, while it contains lime salts, so necessary for the development of the bones of growing children, and which salts are absent from the rain water, as preserved in tanks, while containing all the impurities contained in the dust deposited on the roofs of houses.

(b) No changes have been effected in connection with sewerage and drainage.

(c) The collection and disposal of slop-water, night-soil, household and other refuse are in the hands of the Municipality, who should provide a better sanitary cart than that now in use.

(d) I do not know of any cases of overcrowding in the town, but have been informed that such cases are not uncommon at the location.

There are no occupied houses unfit for human habitation.

(e) There are at present no slaughter-houses in the town. Slaughtering is done on the open veld, at a spot selected for the purpose outside the town. There are no dairies in the town.

There are two bakeries, and the baking and keeping of bread are done in a proper manner.

The last report *re* the butcheries would still apply.

(f) I do not know of any improvement that is required with reference to the storage and preparation of human food.

(g) There is no change in the manner of keeping cattle, etc., in the town.

The same remarks as in last report would apply.

(h) The Municipality has recently provided two latrines for the Native Location, which have already effected a great improvement in the sanitary condition of the surroundings. A headman, or Native Constable, resident in the location is still to be desired.

(i) As in last report.

(k) There is an urgent necessity for three or four latrines to be placed immediately outside the town for the use of Natives generally, but specially for the use of Native servants, who are unable to remain away from their work, and are induced to make use of the sluit just outside the town, and thus creating a public nuisance.

As all household refuse is deposited on the veld within measurable distance of the town, it would be desirable that it should be covered over with ground, as it contains a considerable amount of decomposing animal and vegetable matter, the germs from which are capable of being carried into the town by the wind or by flies, and of thus causing many different forms of disease.

(l) There is a small iron room about a mile from the town, and belonging to the Municipality, and which has been built for the purpose of segregating those having contagious disease.

(m) I had during the last quarter of 1904 two cases of the so-called Malta Fever, to which Dr. Strahan has drawn attention. The disease attacked two brothers, aged about 13 and 15 years. Both patients suffered from frequent relapses, copious perspiration affecting back and legs, and in one case the hip joint; they were ill for nearly three months. During all this time the tongue was clean, except at the very commencement. At the same time a younger brother had a mild feverish attack, followed by inflammation of the middle tarsal bones of one foot, which got to have

all the appearance of white swelling, but got better by slow degrees, and is now quite well.

Though the writer has over twenty-four years' experience in this town, he never met with similar cases. Possibly it may be material to add that the parents of those children had only returned about four weeks from visiting at (without the children) Potgieter's Rust, in the Transvaal, and had brought back with them fever, etc.

During the latter half of 1904 there was no epidemic disease in the District, but in the winter of 1905 we had a severe epidemic of Measles, causing several deaths, chiefly among Native children, the usual lung complications being generally well marked.

There has been little vaccination done during this period. It evidently requires the near presence of Small-pox to get people to move in this matter.

23. EAST LONDON.

(i) EAST LONDON.

DR. J. BARCROFT ANDERSON, DISTRICT SURGEON.

In matters of detail regarding the sanitation and general welfare and the future prospects of East London Municipality, one can add but little to its most excellent and carefully compiled yearly reports. While, on the larger matters, there are problems which on account of their largeness are only now in process of being permanently solved, such as its water supply; or whose solution is not yet seriously taken in hand, such as refuse disposal, and the sanitary construction of dwellings used by Natives. I believe that the Town Council has a healthy public sentiment and interest supporting it in its efforts to deal with such problems in a large, complete, and permanent way, and in its acting on the published advice of its expert advisers.

The daughter Municipality of Cambridge has been controlled by a Mayor and Corporation, who have successfully taken the keenest practical interest in building it up into a town where the public health and general well-being receives the first consideration.

That the District itself should have full Municipal powers is highly desirable, and its lack of these powers as yet may in the future result in serious public injury through its lack of control over the minute sub-divisions of building lots, and the laying out of narrow streets between them. Smaller building lots than would be allowed in the Municipality have been sold immediately beyond its boundary.

In former years, with the assistance of the birth and death returns, the enumeration of the houses, and estimates given by the Field-cornets and Inspectors of Native Locations, and the Cambridge Village Management Board, I made estimates of the population. That made in my last annual report under date of 24th February, 1904, was "nearly 20,000 whites and nearly 30,000 blacks." The figures of the official Census taken on the 17th of April following were 19,793 whites and 29,928 others; results which were practically the same as my estimates. And since my estimates were by the local public considered too high, I think I may accept them in those years when there was no Census as being approximately correct, and so use them for purposes of comparison. It will be noticed from my former reports that my estimate of the total of each race for each of the four periods is almost the same. The reason is that in 1901 a militia regiment and many Johannesburg refugees were resident here, and subsequently when the Johannesburg refugees left there was an influx of the refugees from the northern districts of the Orange River Colony. This accounts for the unchanged total of Europeans in a growing town.

Amongst the Coloured or Native population the net increase by births for the previous four years was under 1,000—a figure which probably represents the reduction in the number of Indians since the enactment of the Immigration Act, and the permission of the Transvaal refugee Indians resident here to leave for there. Therefore I consider my old estimates of the Coloured population to be approximately correct.

The Deputy-Registrar has kindly allowed me to have his books examined to discover the number of registered births and deaths which took place in each year,

as distinguished from those registered in each year, and to obtain the figures for the separate races, and the following are the results for the years from 1900:—

	Births.		Deaths.	
	Europeans.	Natives.	Europeans.	Natives.
1900	557	642	383	733
1901	509	744	305	486
1902	559	798	251	543
1903	585	799	236	593
1904	711	857	217	665
1905	692	860	280	706

From these figures and accepting my estimate of the population you will see that the European death-rate has fallen from 1900 when it was 19·15 per cent. in yearly stages of 15·25 per cent. for 1901, 12·55 per cent. for 1902, 11·8 per cent. for 1903 to 10·85 per cent. for 1904. The figures for 1905 I deal with separately.

The excess of births over deaths for Europeans was from 1900 for each consecutive year 174, 204, 308, 349, 494 and 412.

To these figures those for the Natives present a great contrast. In 1900 there was an excess of 91 deaths over births, while for the subsequent years consecutively the excess of births over deaths was 258, 255, 206, 192 and 154.

This contrast can not have been caused by the number of adult Native males coming to town for work from other Districts, because the excess of Native males over females as shown by the Census was 4,252, and of European males 2,880, which is approximately the ratio between the total number of each race.

I think it can only be attributed to their less sanitary homes. Their huts in the country are not excellent, and many in town sleep in sheds unfit for human habitation, whereas the dwellings of the Europeans are as a whole very fairly constructed.

With respect to the year 1905 I have not had opportunity to obtain a reliable estimate of the European population, and cannot say whether it is below or above that of the preceding year, but I am of opinion that the slight increase in the total European deaths does represent an increased rate. And that this is most probably due to the depressed financial condition of the town, and the consequent poverty of a large portion of its citizens, resulting, not in worse housing accommodation, since now for the first time during the past six years houses are in excess of the demand, but the inability of many people to obtain as much nutritious food as formerly. Amongst the Natives the increase in deaths is less marked, and they have felt the financial depression less than Europeans.

The following are the approximate figures for the two races, showing the proportion between those residing in urban and rural areas:—

Urban.		Rural.	
Europeans.	Natives.	Europeans.	Natives.
17,232	12,602	2,466	16,968

I would here point out the relative position of East London in the Colony, so far as its European population is concerned, as revealed by the last Census. After the Cape Division, which is chief with a European population of 120,000, there comes next a group of three consisting of:—Kimberley, total population, 60,160, European, 20,400. East London, total population, 49,721, European, 19,793. Port Elizabeth, total population, 46,832, European, 23,892, the next being Oudts-hoorn, with a total population of 30,398, of whom 15,211 were Europeans.

(a) The supply for the town still consists of tank water, that is of rain water collected from the dirty roofs, the use of which after recent showers produces cases a mild dysentery, and of the rain water of the Amalinda water-shed mixed with the impure Buffalo River water pumped into it, and filtered through small sand filter beds. This latter water is available for the East Bank part of the East London Municipality only. In Cambridge in addition to tank water, well water is used.

Thus at present the water-supply is defective both in quality and quantity.

I believe that the scheme prepared and recommended by Mr. Charles Anthony, the water-supply expert, who was specially appointed to go into the whole matter, which scheme was adopted by the citizens in public meeting, and is now submitted to Parliament, is the best and most economical means of supplying the present very pressing need of East London and Cambridge Municipalities for a pure and sufficient supply.

This scheme has been so drawn up as to permit of its economical construction in sections to supply different quantities of water, according as one or more sections of the scheme be completed.

The initial section, necessary to supply all the present possible needs of both Municipalities, and giving ample pressure by gravity for fire extinguishing requirements, will cost about £300,000, which is well within the price that the Local Authority can afford to pay, as the present revenue from its partial, intermittent, and hygienically defective supply is £12,000 yearly.

I believe that the carrying out of this scheme will confer a permanent, economic and sanitary advantage of very considerable importance to this entire District; and will therefore benefit the state of which it forms a part.

The supply of salt water for street watering has proved a success.

(b) The improvement in sewers to be reported, is the periodical flushing of the Buffalo Sewer, and its continuation through the Queen's Park by underground glazed earthenware pipes and the construction of the upper end of the Quigney Sewer for carrying storm-water.

(c) The collection and disposal of night-soil, slop-water, household and other refuse remains as hitherto.

The Town Engineer in his report for 1903 strongly urged the necessity of an efficient refuse destructor, but he has not yet been authorised to erect one. The absence of such a destructor is a standing menace to the health of the District, for the solid refuse of the town, other than excrement, lies rotting in a huge decomposing mass within the Municipal limits. It is extremely probable that it was this mass which kept alive the Plague infection which resulted in the second outbreak of that disease that occurred in the early part of 1904, and involved an exceptional expenditure of £6,000, besides interfering with the trade of this place, and causing other harm.

(d) The dwellings of the Europeans are as a whole very fair, and have for some time past been increasing at the rate of about one daily. But most of them are lacking in efficient provision for the exclusion of ground air. Many sheds used for Coloured servants are quite unsuitable, and unfortunately the average Kafir by choice sleeps in a dark and unventilated chamber.

(e) The slaughter-houses though improved are not managed in accordance with the requirements of the Bye-laws. I believe they will not be satisfactory until the Municipality places a skilled European in charge and itself performs the slaughtering at a fixed tariff. The butcherics, bakeries, and dairies remain much as hitherto.

(f) The sale, storage, and preparation of human food are carefully watched by the Municipal Health Department.

(g) The keeping of animals in town remains about the same.

(h) The Asiatic Location remains the same and excellent.

The dwellings in the Native Location are every year becoming less desirable, the old Native wattle and daub hut giving place to sheds constructed of metal, often scrap tin, with mud floors, or with wood floors, insufficiently ventilated to exclude the ground air, and frequently with none, or an insufficiency of glass windows. I believe that if the matter were judiciously dealt with, the Natives would respond to any encouragement given them to improve their health and their social position by occupying more civilised dwellings. I would suggest that standard plans for dwellings in the Location be provided any Native in need of a new house, and that no new house not in accordance with such plans be allowed to be erected.

(i) There has been no change in the Cemeteries or burial grounds.

(k) The various Local Authorities take a reasonable interest in abating specific minor nuisances.

(l) The Hospital accommodation for infectious diseases consists of the Frere Hospital, which is available for Enteric Fever, and the Government Plague Buildings where Plague and Small-pox has been treated. For Tuberculosis there is no provision, and should Government at any time isolate Tuberculosis, as it does Leprosy, it would be most desirable that such isolation accommodation should not be in a District with a climate such as that of this place.

(m) I have no special information on the subject of Enteric Fever, a matter to which the Municipal Health Officer has given his particular attention. The town appears to be never quite free from it.

Cases of Diphtheria occur here occasionally, and when treated in time with anti-diphtheritic serum, it is not a very dangerous disease.

Of the several outbreaks of Small-pox which occurred here during the two years, I believe that in every case the infection was introduced by a person entering the District while incubating the disease.

Of these outbreaks one was controlled by the Municipality, at a cost, I am in-

formed, of about £700, in the others, the cases were treated by Government in the Plague Hospital Buildings at an infinitely less cost, and with complete satisfaction to all concerned, the Local Authority attending to the disinfection of dwellings, surveillance of contacts, and (except in the District) to the vaccination of the contacts, duties performed by their ordinary staff. There were no deaths.

As regards Measles, the profession do not consider it at all serious here, as it is in colder localities. It has in the past year affected the total deaths, but only to a fraction of their excess over the total for the preceding year.

With myself and others there have been a few cases of non-success in vaccinating babies, when the same lymph has been completely successful with children and adults. I believe the lay vaccination of the Natives throughout the District has been practically in every instance successful, those examined afterwards showing proper reaction in at least one place, usually in all, and in a very few who were frequently re-vaccinated showing no appreciable reaction. I believe the Government lymph to be uniformly excellent. My experience is that in this climate the vaccination and re-vaccination at the recognised periods is an absolute protection against contracting the disease.

In the early part of 1904 Scurvy was prevalent, which I attribute entirely to the lack of fresh vegetables or fresh grain diet. In the Gaol it completely subsided upon substituting home grown mealies for old imported mealies.

(ii) SUB-DISTRICT OF MACLEAN TOWN.

DR. T. STEWART CHAMBERS, ADDITIONAL DISTRICT SURGEON.

In drawing up my report for the years 1904 and 1905, I can only say that I have nothing further to add to my last report, which recorded under the various heads suggested the condition of things in this village; there has been no improvement, and I cannot say we are any worse than we were.

During the years 1904 and 1905 the District suffered very much from the prevailing drought, which was not relieved until October last, since when we have had good rains, but accompanied with very hot weather at intervals; prior to which the village was very badly off for water, and it is surprising that the general health has been very good all the time, seeing that most of the rain-water tanks were dry, and many had to obtain drinking water from an old dam, which is far from being pure.

I copy the report made in 1903 as being a fair report of the general state of things; we have a Village Management Board, but they take no interest in things sanitary or otherwise.

Maclean Town is situated north-east of East London, from which it is thirty-seven miles distant, at an elevation of 1,200 feet above sea level. Prevailing winds are from north and north-west, with cold south-east winds in the winter.

(a) The Town is dependent on its water-supply for drinking purposes mainly from rain-water tanks, some few residents obtain it from springs, which are considerably polluted, the ravines in which they arise being used as cesspools. Boring has been suggested, but nothing has come of it.

Many of the farmers in the neighbourhood have underground tanks and good springs of water, so that they are better off.

(b) Nil.

(c) Cesspools are used by several inhabitants, while others use the surrounding ravines. There are no arrangements to remove night-soil, slop-water, or household refuse.

(d) Many of the dwellings are unfit for human habitation, and much overcrowding takes place at Nachtmaal times.

(e) There is only one butcher in the place, and he conducts his business in a fairly clean manner. There is no slaughter-house, only one bakery, and that is conducted in a cleanly manner. Milk is sold privately.

(f) The stores in the place are well conducted and sanitary.

(g) Very few sheep kept, and only by the butcher, who kraals them (few at a time) near his house.

The cattle kraals, of which there are several, are too near the dwellings to be healthy, as many of them are very dirty. Very few pigs are kept.

(h) The Native Location is small, and some distance from the Town, is kept in good order, clean, and the general sanitation is good.

(i) There are two Cemeteries, one for the Europeans, about a mile from the Town, it is very badly looked after, and a good deal of complaint made about it, and endeavours are being made to bring it under the Cemetery Act; the other for Natives is not enclosed and very few are buried there.

(k) and (l) Nil.

(m) There have been no cases of Typhoid Fever, Diphtheria, or Small-pox, in the Town or neighbourhood. Measles was prevalent in 1904, although the death-rate was not increased by it. Amongst the Natives Pneumonia and Whooping Cough were prevalent in 1904 and early part of 1905, there are still a few cases of Whooping Cough in the neighbourhood. Diarrhœa has been severe among Natives during 1905, chiefly children. In March, 1905, two suspicious deaths were reported in the Newlands Location, which on examining I referred to the Plague Officers in East London. On examination (*post-mortem*), they proved to be Plague, and the authorities in East London took steps to prevent the spread, and no further case was reported.

Measles was prevalent in this District in 1904, and on the whole was very mild, very few deaths could be said to be due to the epidemic.

There has been no Small-pox in the District or Town. Although the attention of the residents is being constantly drawn to the fact that Public vaccination is held at my Surgery, no cases have been vaccinated in 1905, and only 28 in 1904. I have drawn the attention to parents of this neglect, but without any result, in fact the Act has not been carried out, and it is very difficult to know if compulsion would not do more harm than good, unless in the case of Small-pox breaking out when all should be made to attend to this matter. In 1903, I vaccinated the majority of children and the unvaccinated in the neighbourhood, and as the birth-rate is not very high, I should not think there are very many unvaccinated.

Registration of Deaths.—Many Natives, chiefly children, and some Europeans die, and are registered by the local Registrar of Deaths, without any medical attendance, and frequently the Registrar is in doubt under what head to register the death; many I should say die from neglect, others I have no doubt from Infectious Diseases. Again others die and are buried, not even registered.

I have lately had to attend at a farm in the Komgha District, where two deaths occurred from Diphtheria in a European family, and the wife ill with it, all caught in the first instance from a Native child that had come from East London, and who died on the farm, and was duly registered, I understand, by the local Field-Cornet. These cases I reported to the Resident Magistrate at Komgha.

I think this sort of thing should be inquired into, as such a lax state of things would not be allowed to happen in the Towns and why in the country Districts.

How one is to check outbreaks of infectious disease under such circumstances is more than I can understand.

24. FORT BEAUFORT.

DR. W. DUNCAN MILLER, DISTRICT SURGEON.

(a) The most important water-supply of the District, that of the town of Fort Beaufort, throughout the greater portion of the period dealt with, continued to exist as noted in former reports. In 1904, however, the Municipality began to move in the direction of improving the supply, both in regard to the sufficiency and the purity of the water. During 1905 a weir was built across the Kat River at Blinkwater, six miles from Fort Beaufort, and cast iron pipes laid down for the conveyance of the water from the weir into the town. The cost of the scheme was met by a loan of £10,000, with the addition of funds already set aside by the Council for the purpose. The result has justified the expenditure, and the scarcity of water formerly experienced in times of drought is not likely to recur. The town is now provided with a plentiful supply of good river water, and in consequence of the improved water supply, and the exchange of the old open six mile furrow for iron piping, the public health of the town has been freed from the constant menace to which it was subject in past years. The water intended for domestic use, as distinct from that served for garden irrigation, is passed through filter beds at the storage reservoir on the Town Extension, and delivered free from all coarse impurities.

(b) No alteration since last Report.

(c) Improvement in the collection and disposal of night-soil has to be recorded. Household refuse is more generally removed by the contractor than in former years.

(d) No overcrowding of dwellings occurs. Dwellings falling into decay and becoming unfit for human habitation are examined and reported upon by the Municipal Sanitary Inspector to the Council.

(e) Butcheries, bakeries, and dairies are inspected regularly, and suggestions for improved management have been carried out.

(f), (g) and (h) No change from last Report.

(i) The situation of Native burial grounds in close proximity to water supply, as noted in former reports, should be discouraged.

(k) No change from last Report.

(l) No Hospital accommodation for the isolation and treatment of cases of infectious disease exists in the District.

(m) Since the outbreak of Small-pox recorded in the Report for 1903, there has been no further epidemic of any kind. There have been a few cases of Enteric Fever reported, generally of a comparatively mild type, and occasional isolated cases of Diphtheria.

Early in May, 1905, two cases of Plague occurred on Town Locations. The men had been seen by the District Surgeon on their arrival the previous day from East London, and kept under close inspection. Microscopic examination of blood, sputum, and contents of a cerebro were made, and the clinical diagnosis of Plague confirmed. One man suffering from the pneumonic variety died within forty-eight hours of his arrival in the town, and the other (Bubonic) was removed to the Plague Hospital, East London, where he recovered. Thorough disinfection of huts, furniture, and clothing, was carried out, and no further cases occurred.

There has been no outbreak of Measles in the District during the past two years.

Vaccination has been duly carried out throughout the District, and has been fairly successful, but as no second visit to vaccination centres can be arranged for, it is impossible to give even approximate figures as to actual results.

Public health throughout the Fort Beaufort District during the period 1904-1905 has been, in my opinion, above the average.

25. FRASERBURG.

(i) FRASERBURG.

DR. W. A. CARDEN, DISTRICT SURGEON.

Generally speaking this District is, I should say, one of the healthiest, partly on account of its great height above sea-level, but also no doubt because of the distance of its centre, the village, from the station. Most parts of the District are eminently suitable for the treatment of early cases of Consumption; on the other hand the Coloured people, owing no doubt to their method of living, are very liable to be attacked and quickly succumb to this disease.

Epidemic diseases do not spread rapidly. No doubt this is due to the great distances which separate the farms, and also to the dryness of the country.

The last heavy rain occurred in the month of January, 1905, on which occasion the village dam became filled, and there was water in abundance for some nine months.

(a) The village obtains its supply of water for domestic purposes from a wind pump erected some little distance below the dam wall; the water is of good quality, though hard, the only possible source of contamination being during its carriage in buckets and other receptacles from the pump to the houses.

The supply of water for the gardens is by means of a furrow running from the fountain and thence through the main street; when the dam is filled after a heavy rain, the water from this source is abundant, the excess runs to the lower end of the village, where there is a second dam to catch the water and prevent it running entirely to waste. I consider both these dams too shallow, thus presenting too large a surface for evaporation. Quite lately the Municipality have obtained a fresh supply of water of excellent quality by boring with a six-inch bore not far from the wind pump above mentioned; after boring some 200 feet they have obtained an abundant and apparently inexhaustible supply.

(c) The bucket system of disposal of the night-soil is in vogue, and works satisfactorily, but there are a few details which require attending to.

The buckets, in many instances, are too small, and in consequence of the lack of system in collection and the carelessness of some of the inhabitants, become filled to overflowing.

A uniform size of bucket and a systematic method of collection would remedy these defects. Inhabitants should also be advised that the buckets are only meant for solid excreta, and to keep the privy sweet by throwing ashes or dry earth over them periodically.

Slop-water is thrown out on the veldt or gardens. Household and other refuse are thrown in the backyards and collected from time to time by a cart. In the absence of water drainage there appears to be no objection to the disposal of slop-water by this method.

(d) I am not aware of any particular overcrowding of dwellings in the village. The location will be dealt with lower down.

(e) The slaughtering of animals for consumption in the village is carried out in a cleanly and satisfactory manner. The butcheries, two in number, are also managed in a cleanly manner.

(f) It is only during the months of December, January and February that any difficulty is experienced in the keeping of meat; during these months most people preserve their meat by salting.

(g) Nothing of importance to record.

(h) The Native Location is, I suppose, the greatest centre of danger in the whole District. Apart from the outbreak of epidemic diseases, Consumption is endemic and rife among the Coloured people, who contract the disease in a virulent form, the chances of their recovery being very slight; there is no Hospital to which they can be sent, so they simply lie in their dark stone huts until they die; they expectorate indiscriminately upon the stone wall, floor, and clothing, consequently the huts themselves become foci from which the infection can spread to other individuals. A small Hospital to which these cases could be removed immediately would to a certain extent remedy this defect, and have a favourable influence upon the mortality.

(i) The European cemetery is well kept and a proper distance from the village, but would be greatly improved by the plantation of trees therein.

The Coloured people's burial-grounds are not enclosed, and are much too close to the Native Location.

(k) The prevalence of dust is perhaps the greatest nuisance in the village, and now that the Municipality have tapped an apparently inexhaustible supply of water, I see no reason why a water-cart should not be sent round occasionally to sprinkle the village streets.

(l) There is no Hospital for the isolation and treatment of cases of infectious diseases.

(m) There has been no special outbreak of Enteric Fever during the past two years in the village, and those cases that occurred were of a mild nature, one death only occurring, that of a coloured girl, who died in the Location (1904).

There was a severe outbreak at one farm in the District in the month of October, 1905, four cases occurring with two deaths, both fatal cases being young adults. One of these contracted the disease at the abovementioned farm, but was taken ill and died on another farm.

A few cases of Diphtheria have occurred, all to my knowledge being outside the village on farms, and readily cured by the prompt use of Antitoxin.

The latter half of the year Small-pox broke out in the Native Location, and as there was a difference of opinion between the Medical Officer to the Municipality and myself regarding the diagnosis, I propose to enter into the matter fully, for it seems to me very important that we should be quite clear in our minds as to the difference between the mild form of Small-pox which Natives contract and Chicken-pox.

My attention was first called to the outbreak by the sudden death of a Coloured woman's baby in the location on September 27th, 1905.

The woman had come from outside in order to be delivered of her baby, arriving in the location one week before the birth and one month before the death of the baby.

She stated she had been only about a month in the location, and gave a history of illness and rash, the latter coming out a day or two after her arrival; she showed some dark marks on her forehead and face, and white scars on the chest and other parts of her body. On examining the body of the baby I found its skin covered with a fairly profuse eruption of a papular and petechial nature. The papules appeared to me absolutely characteristic and distinct from the vesicles usually seen in Chicken-pox, and the baby evidently died before the papules had become vesicular; furthermore a few of the papules were beginning to show umbilication.

I reported the matter to the Magistrate, who in turn informed the Municipality. The latter sent their Medical Officer to inspect the body, and he declared it to have died from a severe attack of Chicken-pox. I may here state that the Municipality absolutely ignored me in the matter, and never once asked me for the reasons I had in making my diagnosis, with which I should only have been too happy to furnish them through their Medical Officer.

However, on receiving advice from Headquarters that the disease should be treated as the major one, the Municipality established an isolated camp about a mile below the Location. In the meantime two more cases occurred, these with contacts together with the woman above mentioned and her two other children were sent next day to the isolated camp.

I considered it important to establish my diagnosis, and consequently did not vaccinate the first batch of contacts in the camp. These contacts, with only a few exceptions, contracted the disease; on the other hand, not one of the later contacts whom I vaccinated became infected, with the possible exception of one girl of about 14 years, who felt sick one day and showed a few, not more than five or six papules on her forehead, and which aborted.

The vaccination test was also carefully applied to those just recovering from the disease, and though typical vesicles appeared in some three or four cases, yet the reaction was decidedly less severe than in those I vaccinated who did not have the disease, and in none of them did more than three insertions take. On the other hand, in no case was the vaccination of those who did not have the disease unsuccessful, and in every case, except one, all four insertions took; in the one exception three vesicles appeared.

To sum up I consider the outbreak to have undoubtedly been one of mild Small-pox for the following reasons:—

- (1) The character of the rash and the preponderance of papules over vesicles.
- (2) The fact that not a single contact whom I vaccinated or re-vaccinated contracted the disease.
- (3) The vaccination test applied to those recovering from the disease was negative in the majority of cases.
- (4) All convalescents showed more or less scarring.
- (5) Adults were attacked as readily as children.

The last case occurred on November 11th, 1905. There were in all some seventeen cases, the only death being that of the baby above-mentioned. There were a few minor defects in the management of the isolation camp, for instance, dogs and poultry were allowed in the camp.

I think the white people in the village escaped simply on account of the fortunate mildness of the epidemic. On the occurrence of the outbreak public vaccination was performed in the Location and village, some eighty-three persons, mainly Coloured, being vaccinated. The white people do not appear to bother about vaccination, and there must be many who are unvaccinated in the village.

During the years 1904 and 1905 no cases of Measles have to my knowledge occurred in the District.

Deaths from Infectious Diseases during the year 1904:—

Typhoid Fever, 2; Tuberculosis (chiefly Phthisis), 11; Diphtheria, 3; Whooping Cough, 1.

Deaths from Infectious Diseases during the year 1905:—

Typhoid Fever, 2; Tuberculosis (chiefly Phthisis), 7; Diphtheria, 1.

The deaths from Tuberculosis were all among Coloured people, it will thus be noticed that in this District as in others this disease is the great scourge among them.

The deaths from Diphtheria, in 1904, occurred among Europeans on a farm, who did not send into the village for a medical man. The importance of sending in for a doctor early in cases of Diphtheria is not sufficiently realised by the farmers in this District. The one case of Diphtheria, in 1905, was in a Coloured child on a farm.

One death from Tetanus took place on a farm in the year 1904.

(ii) SUB-DISTRICT OF WILLISTON.

DR. GEORGE H. AMSLEY, ADDITIONAL DISTRICT SURGEON.

(a) No change since last report. There is a prospect, however, that the "Water Scheme" will soon be an accomplished fact.

(b) None.

- (c) No arrangements made for collection or disposal.
- (d) Same as in last report.
- (e) None.
- (f) As in last report.
- (g) No cattle or swine; donkeys and mules wander about night and day.
- (h) and (i) No change.
- (k) Efforts were made to abate the indiscriminate deposit of human excreta in and around the village, and have been to a certain extent successful.
- (l) Am not aware of any.
- (m) There is at present no evidence of the existence of any infectious disease in the district.

My appointment as Additional District Surgeon being of such recent date, I am quite unable to give any definite replies to the above queries, neither have I any information at hand as to the sanitary condition of the district since 1904.

26. GEORGE.

DR. C. OWEN SNOW, DISTRICT SURGEON

(a) The water supply is as described in previous reports. There is no source of human pollution in the water which is laid on in the town. The rainfall for the year 1905 was 55·45 inches, as compared with 38·13 in 1904. This is, I believe, a record rainfall. Some damage was done to property in the town and District, but no loss of life was, I believe, directly or indirectly traceable to the floods. The open water furrows are not kept clean, and this is to be regretted, as many of the poorer inhabitants use the water in these furrows for drinking purposes. It is also desirable that water should be laid on more generally in the town.

(b) There is no sanitary system in the town.

(c) Tub or pail closets are in almost universal use in the town; each householder has the night-soil from his house buried—weekly or more often—in his plot of ground.

The civilising effect of an approaching railway does not seem to stimulate the “City Fathers” to change this primitive method for a system of removal under Municipal control.

The insanitary cesspits which exist in the town ought to be done away with without delay.

Household and other refuse are “dumped” anywhere on the outskirts of the town.

It ought, in my opinion, to be dealt with by the Municipal Authorities.

(d) Overcrowding exists amongst the poorer classes of both races, not to any very alarming extent, still it is regrettable, especially in view of the increase of the number of cases of Phthisis amongst the Coloured people.

(e) No remarks.

(f) There is room for improvement as regards cleanliness in the carrying handling, and storing of meat, fish, etc.

(g) Though the public nuisance, and sanitary menace, of animals roaming about the streets, and in our water furrows, has been considerably abated by the Municipal Council, still the regulation—which is in force—prohibiting cattle, etc., being in the streets, is not yet strictly enough enforced, seeing that the water in the furrows is used for drinking purposes.

(h) There is no Native Location.

(i) No comment.

(k) The sanitary nuisances, which—though not very glaring—do exist, might easily be remedied by a little more energy on the part of the Municipal Authorities, and a little more co-operation on the part of the public.

(l) There is no Hospital in the true sense of the word; there is an unfurnished building of six rooms near the gaol, used promiscuously to house Syphilitics, Lepers, Lunatics and Paupers.

The want of a small Hospital is much felt.

(m) No cases of Small-pox or Plague occurred during the period under report.

One case of Enteric Fever, four cases of Scarlet Fever, twenty-four of Diphtheria, and thirty-three cases of Phthisis, were reported during the year 1905.

The death-rate from Phthisis, especially amongst the Coloured inhabitants of the urban areas, is very large.

The Lepers who were segregated here have been removed, to the benefit of the District.

I visited Woodville on the 11th June, 1904, in connection with an outbreak of disease which somewhat simulated Cerebro-Spinal Fever, but which, I believe, was Influenza. This was the subject of a special report.

During 1904 and 1905 I vaccinated 648 and 504 persons respectively.

It is impossible to give any vaccination results, as a second visit to the rural areas is not allowed.

Eighteen and twenty-three syphilitic paupers were treated by me during 1904 and 1905 respectively.

There was a limited outbreak of Diphtheria at Uitkyk in January, 1905. It was the subject of a special report to the Divisional Council.

27. GLEN GREY.

DR. W. S. PARK, DISTRICT SURGEON.

Report received too late for classification.

28. GORDONIA.

(i) GORDONIA.

DR. E. H. PHILLIPS, DISTRICT SURGEON.

The conditions prevailing in this District during the year January 1st, 1904, to December 31st, 1904, have not differed in any marked degree from those obtaining in the twelve subsequent months. I have therefore elected to deal with the health of Gordonia for both years in one report.

Among the other duties performed by the District Surgeon, in his official capacity, may be instanced the following:—

Number of Paupers relieved, 1904, 126; 1905, 31.

Number of Syphilitics treated, 1904, 21; 1905, 20; Total, 41.

Number of journeys undertaken, 1904-5, 16, with a total mileage of 1,576 miles.

Number of operations performed, 1904-5, 6 (including 2 amputations).

(a) The condition of the water-supply remains the same as it has been for years past. Despite continued warnings, people still prefer to drink unboiled furrow water instead of boiled river water, and suffer from Gastro-Enteritis, Diarrhœa, and even Enteric Fever, in consequence.

A small minority of rational individuals take the trouble to boil their water for fifteen minutes, or to collect rain-water, and are immune from gastric trouble.

As indicated, the village water-supply is twofold—river and water-furrow—the former in the past two years has been sufficient as to quantity (the Orange River not having dried up into pools as it did in 1903). With regard to quality, although at some periods of the year brackish and at all times muddy, the water is potable and fairly free from bacteria.

The water furrow, which, as I have already remarked, supplies most of the people in the village proper as well as all the people for nine miles above and six miles below the township, is a *bad water-supply*. It is a narrow, shallow, slow-flowing stream with houses and huts dotted along its eighteen miles course. There are, at a rough estimate, about 800 people living on its northern bank before it reaches the village proper. These people, mostly coloured, use the stream for many and varied purposes, *e.g.*, laundry and bathing. As they are in the great majority of cases innocent of watercloset accommodation, and as they deposit their excreta promiscuously all about the slopes draining into the furrow, it is easy to understand (given a few showers to wash the filth into the stream) from whence come the yearly attacks of Gastritis among the inhabitants of the village. There are other defects in the water-supply besides the one indicated above.

The furrow is unfenced throughout the greater part of its course, and innumerable numbers of cattle, horses, and mules (even in the village itself) drink and wallow in the evil-smelling liquid. This defect has been more *en evidence* of late, owing to the increased numbers of transport animals passing through the village with supplies for the German Border. The great trouble is that it will be almost

impossible to obviate these foulings until a double fence has been erected throughout the whole length of the stream.

Despite the obvious disadvantages of such a bad water-supply, Upington is, on the whole, a fairly healthy place. This is owing:—(1) To our very small rainfall (not over 3 inches per annum, and generally very much below that figure); (2) to the strong north-east winds, which scatter the rubbish; and (3) to our perpetual sunshine, which must rapidly destroy the noxious organic matter found on the slopes leading to the water.

Notwithstanding these aids from a kindly Nature, as I have frequently pointed out in previous reports, I am of opinion that, sooner or later, an epidemic of Enteric Fever, with a severe mortality, will sweep through this village.

To remedy these defects our Municipal Authorities should be forced by Government to institute a water-supply to the villagers from the river itself, by means of a system of hydraulic rams, reservoirs and pipes. The writer, after many years' experience of up-country hygiene, doubts whether anything, except a severe epidemic of Enteric or the means alluded to above, will arouse the Village Fathers to a sense of their responsibility in this matter.

(b) Sewerage and drainage are non-existent.

(c) The collection and disposal of night-soil is improving year by year. The Municipality has appointed a Sanitary Inspector at a salary of £300 per annum, who devotes a good deal of time to these and other sanitary matters. Carts come round regularly twice a week, and night-soil, slops and other refuse are removed very thoroughly. The old system of private removal at irregular intervals, or worse still, no removal at all, is dead.

(d) No house is allowed to be built without proper sanitary and stabling conveniences. More might be done to put an end to the overcrowding of certain of the poorer houses in the village; a few arrests of those offending in this way would alter matters and would tend to lessen immorality.

(e), (f), and (g) Satisfactory.

(h) Here again I have to report a distinct improvement over former years, due in all probability to the attention given to the location by the Sanitary Inspector. Early in 1904 all the Coloured people scattered in and about the village were directed by the Municipality to strike their huts and re-erect them in the large location connected with the village. This was a good move.

Now the comings and goings of these people can be better watched, cleanliness of their huts enforced and vagrancy checked by occasional police raids.

The sinking of a well near the location would be a boon to its occupants, who at present have to carry all their water more than half a mile. Naturally, having so far to carry it, the amount of water used for "cleaning up" is as small as possible, and the well would tend to improve the personal cleanliness of these people as well as their health.

(i) The cemeteries at Keidebees and Upington are under the control of a Central Board in the village, which is doing its best to collect funds to fence and lay out both grounds. The latter will be fenced before the end of the current year, and thus a long-suffered eyesore removed.

(k) If this report be compared with those of previous years a marked abatement of nuisances generally, will be noted.

Petty crime (assaults, drunkenness and such like) has however increased of late among the Coloured population, probably owing to the increase in the number of "boys" in the place, due to the enormous amount of transport which is being forwarded through this village to the German Border. It is no uncommon thing to see Natives under the influence of liquor, despite the "total prohibition" laws which are in force on this bank of the Orange River. A slight increase in the number of our foot police (which is inadequate to cope with the present congested state of traffic) should be sufficient to remedy this evil.

(l) Again I have to report the total absence of any kind of Hospital accommodation in this village. This is a very serious matter, and I beg once more to refer to my reports for 1902 and 1903; *re* the urgent necessity for a Lock Hospital in Upington if the working of the Contagious Diseases Act is to be bettered in this District.

Contagious diseases apart, it has often fallen to the District Surgeon's lot to have to perform the most serious operations on pauper patients in a hired hut or a hastily-erected, draughty tent, sometimes with very bad effects on the patient. *Hospital accommodation of all kinds is urgently required.*

(m) Enteric Fever and Diphtheria.—A few cases of both these diseases occurred in 1904. The former seemed to be slightly on the increase towards the end of 1905.

The bad water supply accounts for these cases.

Measles, Scurvy, Epidemic Pneumonia, Bubonic Plague.—No cases have been reported in either of the years under consideration.

Small-pox.—A mild outbreak occurred in, and around, Keimoes (thirty miles from here), and at Zwartkop (nine miles from here), in 1904, the first case being discovered at Kosas, below Keimoes, on July 28th, and the last discharged, from Zwartkop, on December 10th. The disease was brought from German South West Africa by a white family—refugees from the German-Hottentot hostilities.

The number of persons attacked was forty (all unvaccinated), of whom thirteen were Europeans and twenty-seven were Coloured. At the direction of the Resident Magistrate steps were taken by the District Surgeon to isolate the infected and all contacts, the Keimoes Village Management Board rendering all possible assistance to suppress those outbreaks occurring within their jurisdiction.

There were no deaths either at Keimoes or Zwartkop. The total cost was £231 15s. 10½d., of which the Keimoes Village Management Board paid £16 9s. 3½d., and the Government £215 6s. 7d.

A general vaccination of the whole District was ordered by the Resident Magistrate, and carried out by the District Surgeon, with the aid of specially instructed men drawn from the Cape Mounted Police.

3,072 persons were vaccinated and re-vaccinated by the Police, and about 1,000 by myself.

Despite the opinion expressed in my Health Report for 1902, *re* the advisability or otherwise of employing lay vaccinators, I am pleased to report that the results of these vaccinations were, as far as I can judge, very successful. In my own vaccinations 98 per cent. were successful, and I have no reason to believe that the lay operations performed were any less so.

(ii) SUB-DISTRICT OF RIETFontein.

Report furnished by Mr. J. F. HERBST, ASSISTANT RESIDENT MAGISTRATE.

There is no Medical Officer resident in this Sub-District, and as an Assistant Resident Magistrate was only appointed in November, 1905, I regret it will not be possible to give much information on health matters during the past eighteen months.

The Court is situated at Rietfontein, which is a Mission Station on a farm of that name held in trust by the Rhenish Mission Society. There is therefore no Local Authority, as defined by the Public Health Acts, at this Station, nor in fact in the whole area, since there is no Divisional Council in this Division.

A Board, composed of the pastor and his Church Council, legislate for the local wants of the community, which consists of thirty Europeans and about 200 Natives, but as the Native strongly resents any interference in his domestic arrangements not much is done in the way of sanitary improvements.

Taking everything into consideration, however, one cannot but say that the health of the community is remarkably good, a fact, no doubt, attributable to the lengthy periods of strong sunshine and the absence of a high rainfall.

(a) The water is obtained from wells by means of buckets—a very unsatisfactory arrangement. Situate as these are in the low-lying portion of the settlement the water is bound to be contaminated by the human excrement which is deposited under the mimosas which grow near by, the shade and cover of these trees providing the only sanitary convenience for the Natives.

(b) Sewerage and drainage there are none except by the hand of Nature in the shape of thunderstorms during the summer months.

(c) The European inhabitants possess closets and use is made of the bucket system. The disposal of the night-soil takes place at the fancy of the occupier, so also with household refuse.

(d) This evil does not exist here. During summer all the inhabitants sleep under the canopy of heaven.

(e), (f), and (h) Nil.

(i) There is one burial-ground, situated below the level of the wells.

(k) Nil. Should a neighbour complain, he interviews the pastor who by moral persuasion allays the evil.

(l) No.

(m) There has been an entire absence of zymotic disease. During wet seasons a form of Malaria prevails, but such occasions are rare. Mosquitoes are then very numerous in the river beds along which also the fever mostly abounds.

29. GRAAFF-REINET.

(i) GRAAF-REINET.

DR. H. C. HUDSON, DISTRICT SURGEON.

(a) The water supply is pure in its origin in the Sunday's River, about two miles from town, and is brought down in a large cement pipe to the entrance of the town, where it is allowed to run into open furrows, receiving animal and vegetable impurities in its course, until it reaches brandt-dams or reservoirs, where it is stored, the inhabitants obtaining their supply from the furrows or reservoirs as best they can. As pure water has been brought to the entrance of the town, and a reservoir, and other waterworks constructed at very considerable outlay, all that is needed to give the inhabitants a pure water supply is the employment of pipes; but of this necessary arrangement being made there appears to be no prospect at present.

The pollution of the water occurs in its transit in the open furrows and the brandt-dams. These could, with advantage, be cleaned out more frequently than is at present the case.

(b) There is no system of sewerage or drainage, the furrows on each side of the road are, as a rule, equal to coping with the storm-water.

(c) The system in vogue is the cesspool system. In the public institutions and in some crowded localities the bucket system is used. The members of the Town Council seem loth to introduce the latter system universally, although they have been told frequently by experts that it would mean a much lower death-rate.

Slop-water is disposed of in several ways. A few houses have pits sunk, as a rule, within a few yards of the dwelling and underground water tank—the trap and ventilating pipe being invariably absent. Some people use the cesspools for the purpose; others have it thrown out in the yards, or if there is no yard the street is used, and I have even heard—on good authority—of a case in which a chamber containing human excreta, etc., was emptied into a furrow conveying drinking water.

Household and other refuse are removed weekly by the Municipal carts to a suitable place outside the town. No check, however, seems to be placed on people depositing stable litter, etc., on the roadside at the entrances to the town.

(d) Overcrowding exists with few exceptions in the hire rooms in town and in the houses and huts in the Location. A great deal could be done to prevent this by night inspections, and by punishing the culprits. I think, further, that more attention should be paid to ventilation; I have often been called to see a patient in Hare Street or the Location at night, and found the room to be very much overcrowded, the doors and windows tightly closed, and the air holes, if any, filled up with rags.

(e) The slaughter-houses are situated at some distance from the town, from which they are separated by the Sunday's River. They are owned by the Municipality, which has framed rules for their management. They are in a filthy state. There is a well in the grounds which apparently gives an ample supply of water. The floors are cleansed by loosening the dry blood by scraping with a spade, and then sweeping it out. In answer to my question as to why the floors were not kept clean by frequent flushing with water, one of the men in charge told me that it was impracticable, as the floors became so muddy and slippery!

The dairies and bakehouses are under no direct supervision. As far as is known they are owned by respectable people, and I have heard of no complaints against any of them. Milk, however, also comes from the location and Hare Street, a double row of hire-rooms and the filthiest part of the town, being hawked about and sold by the bottleful. When it is remembered that adulteration is often practised, most probably with impure water, the danger may readily be inferred.

(f) Meat is supplied by butcher's cart and is sold at the Cold Storage and meat shops. Bread is also delivered by cart and is sold at the bakeries and small shops.

(g) Cattle, swine and other animals are kept in the yards of several properties, and are under the supervision of the Municipality. In wet weather these become a nuisance.

(h) The location is situated to the north-east of the town on a natural incline, and is well drained. It has increased in size very much during the last few years. The chief causes of disease are overcrowding, with badly ventilated houses; there is no arrangement for the removal of night-soil. The death-rate in Coloured children is appalling, and is chiefly due to Acute Intestinal Catarrh.

(i) The burial-grounds in the town and outside are kept in good order. They are not in too near proximity to dwellings. There is surface drainage, which is well looked after. The cemeteries belong to their respective Churches, which have

regulations in force as regards the granting of authority for and the manner of carrying out burials.

(*k*) The dust storms in summer are very trying, especially to those suffering from chest troubles, as well as being a means of spreading infection. The effects would, however, to a considerable extent, be mitigated by watering the streets frequently; at present a small water-cart, entirely inadequate for the purpose, is used occasionally.

(*l*) There is a Lazaretto a mile and a half from town for the treatment of Small-pox. This is owned by the Municipality.

(*m*) A report on the infectious diseases occurring during the year is given by the Medical Officer of Health for Graaff-Reinet.

With the exception of the prisoners at the gaol no vaccination was done in town or District during the year.

(*ii*) SUB-DISTRICT OF NEW BETHESDA.

DR. P. A. HOOLE, ADDITIONAL DISTRICT SURGEON.

As stated in my former reports, the water-supply of this village, notwithstanding the constant droughts of the last few years, has been both as regards quantity and quality satisfactory.

The altitude of this part of the country, and the pure air, sufficiently account for the low death-rate and the small amount of sickness prevailing.

Certainly a few cases of infectious diseases have made their appearance in a sporadic form in the village.

I am convinced that the cause of the prevalence of zymotic diseases on farms, and in small up-country villages, is to be found in the manure-heaps.

There have been isolated cases of Diphtheria and Typhoid, with one death, owing to the latter complaint. Antitoxin has been invariably used in the few Diphtheritic cases with uniform good results.

The health of the Lockup-keeper and his wife has been satisfactory, and the same applies to the temporary prisoners. The gaol is kept in a good sanitary condition.

(*a*) Our water-supply, as above stated, has been remarkably pure, and quite sufficient for household and even irrigation purposes.

(*b*) A sewerage or drainage system does not exist in this village.

(*c*) Cess-pits are in universal use. Formerly, as I am given to understand, night-soil, slop-water, etc., were deposited at the back door, or at any other convenient spot.

I may mention that, with few exceptions, well water is not used for drinking purposes, and using the river water has its disadvantages, having to pass through the streets in open furrows, therefore being liable to contamination.

(*d*) As each individual family has a separate abode, overcrowding is impossible.

(*e*) The two butcheries here are kept in a satisfactory manner, the slaughtering taking place on the outskirts of the village. The place of deposit of "offal," which I mentioned in my last report, has been changed.

(*f*) Our morning market still supplies us with good fresh meat and vegetables, the latter being scarce, owing to the unfavourable seasons.

(*g*) The keeping of swine in the village is supposed to be prohibited, but I notice the Municipal Regulations, in a few instances, are being evaded in that respect.

If the Health Act is to be properly enforced, the powers that be have to be continually reminded of their duties.

(*h*) Regarding the Native Location, I have no cause for complaint; very few cases of sickness were reported, and those mostly cases of infantile Gastro-Enteritis, caused by improper food.

(*i*) The cemeteries are kept in clean and decent order.

(*k*) No nuisances of any serious nature have been brought to my notice since my last report.

(*l*) There is no hospital accommodation of any description in this village.

(*m*) I can report no cases of "Amaas," and almost the whole community has been efficiently vaccinated.

30. HANOVER.

DR. JAMES WILSON, DISTRICT SURGEON.

(a) The scheme for conducting the water-supply of Hanover from the spring to the village by piping has been for over a year an accomplished fact. The spring, which is 1,100 yards north-west of the village, yields about 200,000 gallons per diem, and attempts have been made by the Municipal Council, by means of extra boreholes, to increase the supply, but without very much success.

The water is brought to the upper part of the village in steel pipes, 12 inches in diameter, which were laid down for irrigation purposes, and the town supply is taken off from this main pipe in one six inch pipe. Not more than 20,000 gallons of water per diem are required, however, for household purposes, so that nine-tenths are available for irrigating the gardens in the village. It will be seen therefore that the system of main piping is more than amply sufficient for the present supply.

The water is distributed throughout the village by means of one 4-inch pipe line and two 2-inch pipe lines branching off from the 6-inch town main, and one 2-inch pipe line taken direct from the 12-inch irrigation pipe. In all, some 1,300 feet of 4-inch piping and 6,000 feet of 2-inch piping are used in the town distribution, as well as about 300 feet 1-inch piping used in side streets. All pipes, with the exception of the one inch and two inch galvanised piping, are covered with Dr. Angus Smith's patent solution. A flushing valve is fixed at the lowest point in the 12-inch main, and in the last 300 yards of this main there are six man-holes built for removing sediment from the pipes. The fall from inlet to outlet of the main is only four feet, although at the point where the flushing valve is fixed the fall from the inlet is nine feet.

The water is not carried into the houses, some very conservative worthies fearing it might be put to improper uses, but is obtained from stand pipes with small stone and lime platforms under them, twenty-two in number throughout the village.

The scheme was laid down at a cost of almost £2,000. The Government advanced the money, which has to be repaid by the Municipality in ten yearly instalments, interest being charged at the rate of 4 per cent. per annum. The water, which is of excellent quality, thus escapes every risk of pollution, and the general health of the place has very much improved in consequence.

(b) The surface drainage of the village is better, and as the village lies on a gentle slope, pools are seldom seen. I have had to complain to the Municipality about the condition of some of the irrigation street furrows. Tree roots have in places disjointed the masonry; levels have accordingly gone wrong, and water stagnates and gets offensive with leaves, etc., rotting in it.

(c) The same system continues with regard to disposal of night-soil and household refuse. I am hopeful that we may in time get a public shop-cart, but changes incurring expense are very difficult to bring about in up-country dorps, where the idea of fatalism is very prevalent, and the belief that what was good enough for their "Ouders" is good enough for them.

(d) There is no particular overcrowding, but there is hardly any ventilation in the coloured people's tenements.

(e) Slaughtering is done in the open at proper shambles outside the village. Butcheries and bakeries are kept in a cleanly manner. There is no public dairy.

(f) The sale, storage, and preparation of human food are properly conducted.

(g) Swine are not allowed to be kept inside the Municipality.

(h) The Native Location is well and cleanly kept, but the open veldt remains the only latrine.

(i) The European graveyard has been recently tidied up, under the supervision of the Dutch Reformed Church.

(k) Things have lapsed considerably in sanitary affairs since the Typhoid scare died down. The Council have now no Medical Officer of Health, and the so-called Sanitary Inspector has to supervise the daily market, to attend to the irrigation water, and to look after lots of other jobs of a like nature.

(l) There is no Hospital in the district for isolation and treatment of infectious cases, and the Government Contagious Diseases Hospital is now shut up.

(m) Enteric Fever.—The first six months of 1904, on which I have already reported, saw us through the thick of our big Enteric outbreak, but cases keep turning up from time to time, and the village has never been free from the trouble for a very long stretch at a time. Indeed, the disease seems to have become endemic in the village, and the same might be said of some farms in the district. No one now doubts that the Typhoid and Gastro-Enteric epidemics resulted from some

pollution in the drinking water, and the statistics for 1904 and 1905, referred to below, abundantly bear this out. The water piping scheme was completed very early in 1905.

Diphtheria.—There have been a few isolated cases of Diphtheria since my last report, both in the town and district, but no general outbreak.

Small-pox.—There has been no small-pox during the last eighteen months.

Whooping-cough was fairly prevalent towards the end of 1904, and lasted during the early months of 1905, several adults getting affected. Whooping-cough was followed by Measles of a fairly mild type, most of the deaths occurring among badly tended, badly housed coloured people. No other infectious diseases call for special mention.

Vital Statistics.—(1). For the year 1904: The census returns of the whole district gave a population of 3,821, of whom 1,483 were Europeans and 2,338 coloured. There were 48 European and 53 coloured births, while 38 Europeans and 104 coloured people died. This high death-rate resulted in a great measure from the Enteric and Gastro-Enteric outbreaks, there being 15 victims of the former, while 31 people died from diarrhœa and kindred troubles. 51 persons died from diseases of the respiratory organs, 16 of whom were tubercular. A coloured woman died early in the year of Small-pox. 3 deaths from diphtheria and 6 from Whooping-cough occurred during the year. Cardiac trouble is returned as cause of death in 9 cases.

(2). For the year 1905: 54 white and 51 coloured children were born during the year, while 22 white and 58 coloured deaths took place. Disease of the respiratory organs caused death in 37 cases, 10 of which were tubercular. There were only 3 deaths each from Diarrhœa and Enteric Fever. Whooping-cough and Measles had 2 and 4 victims respectively, while 7 deaths are attributed to cardiac disease.

31. HAY

DR. JOHN CRANKE, DISTRICT SURGEON.

As I was only appointed District Surgeon on the 1st July, 1905, this report deals with the latter half of the year 1905.

The total population of this district, according to the last Census, was 10,507, of which 4,779 were white and 5,828 were coloured.

The area is 6,526 square miles, which gives 1.61 persons to a square mile.

The number of births registered during the half-year was 132, and deaths 52. The great majority of the latter were uncertified by a medical man.

The general health of the district has been remarkably good.

Seven cases of Small-pox were notified. They were of a mild type; two cases, however, were followed by deep pitting. Only one patient was unvaccinated.

No other cases of infectious disease were notified. The Small-pox was imported from Barkly West. 1,353 persons were vaccinated, and some others by the Police, of which I have no record. Most of the vaccinations were primary and successful, mostly natives, as there is a prejudice against the operation by a certain section of the white population, and there are still many unvaccinated persons in the district. So far as I can gather, very little vaccination has been done for several years, no systematic tours having been undertaken.

There are two Native Locations in the district, with a combined area of 28,949 morgen, and a population of 1,017. The inhabitants of these Locations are clean as to their huts and habits, the huts being well-built of sticks and hard mud, and the surroundings kept clean. This is much more than can be said for the Locations at Griquatown and Postmasburg, where the huts are largely made of old rags and sacking, and the surroundings not kept clean.

I have caused both these Locations to be cleaned repeatedly, but the nature of the inhabitants is essentially dirty, being mixed breeds, whereas most of the inhabitants of the other Locations are Kafirs, and therefore much cleaner naturally.

The Contagious Diseases Hospital is a four-roomed cottage, and at the end of the year contained twenty-four native patients, mostly bad tertiary cases. The accommodation is inadequate, and I think that there are many more cases in the district amongst the natives, who hide their disease and will not come for treatment until really bad. I have observed several cases of Tertiary Syphilis in white inhabitants.

There are no cases of Leprosy in this district, so far as I know, and I have been round a large part of it.

Three mild cases of Scurvy came under my notice, which quickly yielded to treatment. I found that potatoes were better than limejuice in these cases.

(a) The water-supply of the village is from wells which are not deep, and therefore liable to pollution, and from a spring on rising ground on the northern boundary of the village. There are a large number of private wells, and one under the control of the Village Management Board. The supply is not abundant. The water in many of the wells is slightly brackish, especially after rain, but the absence of water-borne disease speaks well for the purity of the supply. If a case or two of Enteric Fever were imported, I am afraid the disease would spread. I cannot see how the supply of water can be improved. The rainfall for the six months was 1.73 inches.

(b) Of sewerage and drainage there is none. Each house makes its own arrangements as to the disposal of night-soil, slop-water, etc.

(c) There is no sanitary service, and until recently all refuse was dumped in the immediate neighbourhood of the village, which thus became surrounded by a circle of filth, and could be smelt from afar. Although things are yet far from satisfactory, they are improving, and I think the Board will be brought to understand the value of cleanliness before long.

(e) Slaughtering is done outside the village, and there is nothing to complain of with regard to the cleanliness of this and the bakeries, etc., in the village.

(g) Cattle and goats are mostly kraaled on the outskirts of the village, but are not prohibited inside. There are no swine.

(i) The burial-grounds are well situated and well kept.

(l) There is no hospital for the treatment and isolation of infectious diseases.

(m) No cases of Measles were notified.

Eight coloured persons, all very old and infirm, are in receipt of rations from Government.

32. HERBERT.

DR. CHARLES A. PHILLIPS, DISTRICT SURGEON.

General Remarks.—Having only taken over the duties as District Surgeon in May, 1905, I can only refer to the previous report up to the 30th June, 1904 (written by the then District Surgeon, Dr. O'Toole), for details.

Subsequent to that date there has been nothing of interest to report for the year 1904.

A vaccination tour of the district was, I understand, carried out by Dr. O'Toole in November, 1904. The general health of the whole district for that year was uniformly good, and there were no epidemics reported.

The same high standard of health has continued up to the present, and there appears no reason why, under the existing salubrious conditions of pure air, and plenty of it, this state of things should not continue.

The town of Douglas itself is very pleasantly situated on the Vaal. Its streets are kept in excellent order in point of cleanliness; while the efforts of the Municipality at keeping all in such a state, and providing shade in the shape of rows of trees on either side of our streets, is unrelenting.

There is an excellent water-supply for all purposes, only it seems a pity that steps are not taken to erect a wind-pump in place of the hand variety of that useful help. Then suitable receptacles for storing the water so raised would do much to further minimise the labour of the distribution of water for household consumption.

The general drought has been severely felt in this district, as elsewhere, and to this want of rain one must attribute much of the ill-health which has been noticed, as both fresh vegetables and meat have been very hard to get. A great deal, however, might have been done by the owners of the water-erven, supplied by the furrow, to help their brothers on farms further out in the District. With a little energy, constant supply of vegetables could easily be provided; but the apathy of a certain section of our community has become a bye-word.

Almost as soon as my duties as District Surgeon began here, Small-pox was reported to have broken out in the locations about Schmidt's Drift.

The first outbreak occurred on May 22, 1905, in a hut of Location No. 6, where a Coloured male brought the disease from Kimberley. Eight other huts were infected subsequently to this, but to the unremitting care and personal supervision of the Inspector of Locations, Mr. Charles Orpen, can be attributed the shortness of the outbreak, it being entirely stamped out, and the last patient discharged, by the end of August.

Two other outbreaks, one at Doorn Laagte (the farm of Mr. J. van Niekerk) and the other among some locations at Kolkfontein East, near Modder River, were reported and successfully dealt with and stamped out, in both of which places much help and assistance was given by the owners who took great pains to enforce isolation and provide guards.

Twenty-two cases were discovered at the Schmidt's Drift outbreak with two deaths. The last case was discharged on the 1st September.

Three cases at Doorn Laagte; no deaths. Two cases at Kolkfontein East; one death. All discharged 1st September.

The steps taken in every case to suppress the spread of the disease were simply isolation of the huts and contacts, a guard, and the free use of the yellow flag, being all that was found necessary to this end. This and vaccination of all contacts and others were found ample to fulfil all requirements.

It may here be remarked that the disease ran a very mild course, two deaths being caused by Nephritis, and one by Pneumonia.

In connection with the above outbreak, besides the vaccination of contacts at the time, and others in the locations surrounding, which in all amounted to 1,625 successful vaccinations, I made a general tour of the District for public vaccination, when some 1,435 operations were made, but the success or not of these last were not ascertained, as no second tour was authorized for that purpose. The lymph as a rule gave good results, and was much better than that usually given out. Speaking generally, the people, both White and Coloured, were anxious for vaccination, but the residents in the neighbourhood of Modder River, Koodoosbergdrift, and surroundings, in face of the fact that ample notice was given, did not make use of the opportunity in the way they might, hundreds remaining away; this tended to render the last part of my tour abortive to a large extent.

Total cost incurred in dealing with the outbreak was £227 0s. 1d.

(a) to (h) As before reported.

(i) The cemeteries, two in number, are kept in good order, but it is desirable that the new site be fenced in, and that plans be made for the orderly regulation and laying-out of plots, and some overseer appointed to attend to their due allotment; at present no order prevails in this connection.

(k) None exist.

(l) There is no Hospital accommodation of any sort. This fact surely forms a very serious blot on the Douglas escutcheon. What a boon a Cottage Hospital would be to the whole District; one frequently has cases requiring careful nursing and daily personal attention, which it is hopeless to think of getting without such an institution. Then the absence of a Contagious Diseases Hospital is a terrible thing, in face of the fact that Douglas is the centre of so many thousands of Natives, and the Location Inspector informs me that the huts under his supervision teem with untreated cases in all stages of the disease.

(m) No cases of Enteric or Diphtheria have been reported. There have been three outbreaks of Small-pox, when twenty-seven cases were treated, with three deaths. I have already dealt in the body of my report with the particulars of this outbreak.

Measles broke out among the Native huts at the beginning of the year in Douglas, but as it was not reported, no steps could be taken to treat the cases in any way. This outbreak was the cause of a few isolated cases among the White population of the town. The cases were isolated, and ran a natural course, two only being reported.

No cases of Plague were seen, and no rats exist here.

33. HERSCHEL.

DR. PHILIP MILLARD, DISTRICT SURGEON.

In submitting a report upon the general health of Herschel during the last two years, one must bear in mind that Herschel is a Native Reserve.

The District comprises an area of one thousand square miles, and supports a population of 36,000 persons; of these only 300 are Europeans, the remainder consist of Fingoes, Tembookies, Pondos, Basutos, and a handful of Bastards.

All these people live in small villages or kraals—the district being geographically divided into “locations,” each of which is under the supervision of a Headman.

The European element, with very few exceptions, consist entirely of officials and traders.

The village of Herschel contains eight families only—all Europeans.

Thus in dealing with the various items of this report, a differentiation will be made between Herschel village proper and the Herschel District generally, which latter implies the Native population. During 1904 and 1905 the general health of the whole District, with the exception of one or two epidemics which will be mentioned later, leave very little to be desired.

The extreme altitude of this part of South Africa, and its exceptionally fine climate, coupled with the healthy happy existence that all the inhabitants live, is probably the cause of such a satisfactory state of affairs.

(a) The water-supply is especially abundant and pure. Many of the rivers and spruits run all the year round, and every village, indeed, almost every hut, has its own spring.

In the village of Herschel itself we have two excellent sources of supply, viz., two springs; one of these has been opened up and "bricked in" during the past twelve months.

(b) and (c) Of sewerage and drainage, in the true sense of the word we are entirely ignorant; but as each house possesses its own garden, and everywhere there is ample space, the pail system of disposing of night-soil, etc., which is in vogue, answers admirably.

Household and other refuse are either burnt, or deposited in trenches, which are afterwards filled in.

The Natives use the bush and the various dongas and sluits as latrines, but the villagers themselves are a pattern of cleanliness and order.

(d) Overcrowded Dwellings.—As far as the European residents are concerned there is no cause for complaint. Among the Natives some huts have been more overcrowded than they should be. This may be attributed to the scarcity of thatching grass during the last couple of years, and also a desire to avoid the hut-tax, while a succession of bad seasons of late has deterred many Natives from incurring extra expense by building more huts for themselves.

Unfortunately the Natives do not yet realise the dangers of overcrowding, and as all doors and windows are closed at night, I fear this may tend towards the spread of Tubercle. I am glad to be able to report that so far as Tuberculous diseases have no very great hold upon the people of this District. Most cases are those of Miliary Phthisis, which occur among Natives returning from the mines. The disease is acquired at the mines, generally Kimberley or Jagersfontein, and the boy, feeling no longer fit for work, returns home to die. The disease is exceedingly rapid in its action, and invariably fatal. Among the Bastards the disease is more frequent and may be considered endemic, and is accompanied by the formation of vomicae, as is the case among Europeans.

(e), (f), and (g) Entirely satisfactory.

(h) The different locations are in the charge of the various Headmen, who are responsible to the European Native Location Inspectors.

The Headmen for the most part are quite alive to the importance of sanitation, and all illnesses of an infectious nature are promptly reported.

(i) There is no public cemetery.

In the village a portion of the Residency Reserve has been railed off, and is used by the European community as a semi-private burying-ground. The Natives bury their dead near to, but if possible out of sight, of their kraals.

The actual mode of burying varies according to the tribe to which they belong; the graves are always well dug from a hygienic point of view.

(k) On the subject of abatement of nuisances there is nothing adverse to report.

(l) There is no Hospital accommodation in the District; so far I have not felt the need of any.

(m) Early in 1904 a small epidemic of Enteric Fever occurred among the European Police stationed at Palmietfontein; it was quickly got under control and was unattended with any fatality. A similar small epidemic occurred in 1905, the first case being in a Native of the village, and was attended with two deaths. It did not spread.

Enteric Fever may be considered endemic here, but the last two years have been singularly free from the disease.

There is however a Fever which is rather prevalent here in the summer time. It is a variety of "slow-continued fever," and appears to be of the nature of a cross between Enteric and Malaria. It often recurs from year to year. The chief symptoms are headaches, fever at night time, and rigors, with a persistent pain in the epigastrium, and splenic tenderness. It does not terminate fatally. It yields fairly

easily to Quinine treatment. The sufferers are almost invariably young adults. Females are attacked more frequently than males.

There have been no cases of Diphtheria.

Small-pox.—During 1904 and 1905 there have been 215 cases of Small-pox. Although these occurred in thirteen different outbreaks I have no doubt that they all originated from the same source.

In 1902 (at the conclusion of the late war) a general vaccination tour was ordered. Although at that time the great majority of persons availed themselves of vaccination, many evaded it. In some parts whole locations seem to have resisted it; indeed in one location the Natives tell me they would immediately wash off the lymph after it had been applied by the District Surgeon! This opposition was entirely due to ignorance of the motive of vaccination. It is these very locations that have had the disease so badly during the last two years.

Of the 215 cases almost all occurred in two locations, and I have no doubt that most of the others were exported from the infected area, though I was unable to directly trace it in every instance to that source.

The majority of cases had the disease in a tolerably mild form; thirteen persons died of the disease. Only two persons who had been previously vaccinated developed Small-pox, and they had it extremely mildly.

At first I tried to cope with the disease by placing guards around the infected huts and vaccinating all immediate "contacts."

I found, however, that this did not answer at all, the restrictions did not suit the "contacts," and the guards (Native) did not understand their duty. Therefore, finding very few persons in the locations immune to the disease, I treated them all as "contacts" and vaccinated them all; and beyond warning them about mixing with persons outside the location I removed the restrictions of the guard.

After this thorough vaccination, Small-pox soon disappeared.

It must be borne in mind that Small-pox will always be endemic here as long as Basutoland remains practically an unvaccinated country.

The lower end of Herschel District is fairly safe, but on the Basutoland border there are still several locations that are but poorly protected.

I am glad to be able to report that during the last few weeks a general vaccination of these said locations has been ordered, and will be undertaken in the course of a few days.

During the last few years the Natives have come to realise the protective value of vaccination, and now appreciate it highly, so I do not anticipate any difficulty in persuading everyone to be vaccinated.

Scurvy.—This disease has been conspicuous by its absence during the last two years.

Syphilis is rare among the Natives here. In Basutoland, on the other hand, it is an extremely common disease.

I attribute our immunity to the fact that the Fingoes have very little dealing with the Basutos, and as yet have not intermarried with them.

The latter half of 1905 has been marked by a severe epidemic of Measles, which swept throughout the district. It found virgin soil as far as the children were concerned, and black and white alike took the disease.

I do not consider it was a particularly severe form of Measles, but several Native children died from Pneumonia as a sequelæ. No European children succumbed.

Following the Measles, Whooping Cough broke out rather badly among the children. At the close of the year, however, both diseases had practically subsided.

Leprosy.—Thirty-eight Lepers remained on the register at the end of 1905. They are all Natives. We are anxiously awaiting the order for their removal.

34. HOPE TOWN.

(i) HOPE TOWN.

DR. J. J. O'REILLY, DISTRICT SURGEON.

(a) and (b) Same as in last report.

(c) Night-soil is carried away twice weekly by the bucket system. It answers very well.

(d) Overcrowding and dwellings unfit for habitation have not been noticed.

(e) The management of slaughter-houses, etc., has not come under my notice, as there is no Medical Officer of Health for the town.

(f) The shops look clean, otherwise I know nothing of their interior, or how they are managed.

(g) and (h) The same as in last report.

(i) Cemeteries and burial-grounds are well kept.

(k) Nothing under this heading has given any trouble.

(l) There is no Hospital for infectious diseases, although I believe what was formerly used as a Hospital is now occupied by the Municipality for the storage of sanitary buckets, etc.

The Government Hospital for treatment of Paupers under Contagious Disease Act has been closed since November, 1904.

(m) In September, 1904, I vaccinated some eighty-six people, of whom only nine were whites. All cases were successful, but one, due, I think, chiefly to using only recently prepared fresh calf lymph.

There were no cases of Diphtheria, Enteric Fever, or Small-pox during years 1904 and 1905.

Quite an epidemic of Measles occurred during the months of July, August, September, and October, 1905. It originated from a family coming here from Molteno in June.

The outbreak was not accompanied with a high death-rate, only some three babies dying of the disease with complications. Quite a number of elderly people got the disease in a most virulent poisoning of their system, but luckily with no deaths. It struck me as very remarkable the marked contrast between cases of apparently the same variety of Measles in the young and old.

I regret that the Government decided to close the Contagious Diseases Hospital in November, 1904, which I think was a most retrogressive step. Since then I have had trouble in getting contagious diseases patients to attend regularly for their medicine.

A few cases of apparently very mild Scarlet Fever occurred in October, 1905. It did not seem to spread in houses where no great precautions were taken. In one case the desquamation was most marked, so could come to no other conclusion than that of mild Scarlet Fever; some of the old Dutch "vrouws" called it "Rooi Hond."

Whooping Cough was again prevalent in July and August, 1905.

(ii) SUB-DISTRICT OF STRYDENBURG.

DR. DANIEL HENDERSON, ACTING ADDITIONAL DISTRICT SURGEON.

As I took over the duties here from the 1st June, I am unable to speak personally for the part of the year previous, but from hearsay I can gather that the health of the village and District for that period was about the same as the time I have been here, namely, good. A slight epidemic of Measles occurred at Karee Kloof, about three hours out. About a dozen persons were affected, with no deaths.

(a) During the latter part of the year the village suffered severely from the drought, some of the wells drying up and the supply in others so much reduced that it was found necessary to deepen them. The village well was totally inadequate to supply those dependent on it, and those so situated had to make the best arrangement they could with owners of private wells.

An attempt was made by the Village Board to get a fresh supply by sinking a bore-hole, but after boring to a depth of forty feet no water was found, and it was abandoned, either for that reason or lack of funds. Rain-water stored in tanks served a great many for drinking purposes, but naturally owing to the drought they also suffered.

(b) There is no system of sewerage or drainage.

(c) Night-soil is collected when necessary by a contractor who does his work well. Matters might be improved by having the buckets cleansed and disinfected.

The night-soil has been until recently deposited in a sluit less than 100 yards south of the location. No attempt was made to cover it up. Owing to complaints to the Village Board, it was decided to deposit it further away (which has been done), and to cover in the old sluit with lime and earth, but after a period of nearly two months nothing has been done, and probably nothing will be done for a further extended period.

Household and other refuse the contractor removes periodically.

(d) There is no overcrowding so far as I am aware.

(e) Slaughter-houses, etc., nothing to complain of.

(f) Nothing to report.

(g) Keeping of cattle, etc., satisfactory.

(h) The location consists of about twenty huts built with paraffin tins and sacking. Much might be done to have the old tins and rubbish removed and provide a proper latrine.

(i) Cemetery well kept.

(k) No report.

(l) None.

(m) No Diphtheria or Small-pox occurred. One case of Enteric, reported November 20th, in a Coloured girl in the location; source of infection unknown. The girl recovered, and no further cases occurred. The Village Board supplied disinfectants, and the Board officials under my directions instructed the mother what to do to prevent the disease spreading.

35. HUMANSDORP.

DR. JOHN J. COULTON, DISTRICT SURGEON.

(a) The water-supply for the village is obtained from a good, strong, never-failing spring, situated about four miles from and 150 feet above the village. It is led through an open furrow into the village, and then in open furrows along the streets. There is little chance of it being polluted on its course across the common, and the Municipality are concreting out the sluits in town, and they will then be able to keep them clean. Many of the inhabitants also trust largely to rain water tanks for drinking purposes, though I am doubtful if the water so caught on the roofs is purer than that in the sluits.

(b) Sewerage and drainage, nil. Waste water is thrown out on the land behind the houses, which in most cases is used as garden land.

(c) Since the beginning of 1901 a good pail system has been established by the Municipality, all pails being emptied once a week on farm land two or three miles from the town, and should there be any houses with cases of infectious disease in them, their pails are kept separate, the excreta well disinfected and buried by itself on the common.

(d) Only one case of overcrowding has come to light by some Coolies; it was dealt with at once by the Municipality.

(e) No slaughtering is allowed in the village. There is one slaughter-house on the common which is kept in a fairly good state. Most of the meat sold in the town is killed on the farms just outside the town, and over which the Municipality has no control. Bakeries are kept clean and in good order.

(f) I know of nothing objectionable in the sale, preparation or storage of human food as conducted in the town.

(g) No more than six head of cattle are allowed to be kept on any one erf in the village, and whenever this number has been exceeded or proved a nuisance the Municipality has compelled its abatement. Very few pigs are kept in the village.

(h) The location is fairly clean and well kept, is in a position below the town, where it cannot become a nuisance. The houses are as a rule fairly well built, in fact better than is usual in such a place, but some few leave much to be desired.

(i) The cemeteries for both White and Coloured persons are fairly kept, and both situated in such a position that they cannot well become a nuisance to the town or location.

(k) The Municipality look well after the abatement of all nuisances, and take prompt action when any are brought to their notice.

(m) On February 26, 1904, I went to see a Native at a place called Kleinfontein, on a farm about twenty-seven miles from this place, and situated on the Klein River, about six miles above Hankey. It is quite a little village with a Mission School in it, within a radius of a mile. There are two houses inhabited by European farmers, and at least twenty-five or thirty houses or huts inhabited by Natives; I found the man suffering from Typhoid Fever. He had shortly returned from working at Port Elizabeth, where I think he must have contracted the disease. It spread among both White and Coloured people until June, by which time I had seen about thirty cases, but I do not think, as my visits were only once a week or fortnight, that I saw nearly all the cases that occurred.

On June 11th, 1904, the Magistrate sent me to investigate the matter, when I found two white people and sixteen coloured suffering from the disease, and was told that there had been eight or nine deaths from it. On my recommendation the Magistrate issued the following regulations;—

(1) That no dirty clothes were to be washed in the river, but that water was to be taken from the river and the clothes washed at least twenty yards from the bank.

(2) That every householder must provide himself with a pit for sanitary purposes and bury the excreta, as before there was no convenience of any kind, each going where he liked on the veld or in the cattle kraal.

He also caused the police from Hankey to visit the place regularly to see that the rules were carried out properly. Under these circumstances the state of things rapidly improved, and by the middle of August there were no more cases. In all, as far as I could find out, there were about fifty cases—six Europeans, and ten or twelve deaths, none of them Europeans. During the same period there were also three cases of Typhoid in Hankey, all being people who had been visiting in Kleinfontein, where I have no doubt they contracted the disease, which however did not spread.

In January and February, 1905, I saw two cases of Typhoid in Hankey, one a European and the other a coloured man; also three doubtful cases in a coloured family in one hut at Enteston, Hankey; all recovered, and there was no spread of infection.

In March and April, 1905, I saw five doubtful cases of Diphtheria at Klein River farm. They occurred in two families of better class farmers living close together and nearly related. There was one death, a child of about five years, but no spread of the disease.

There have been, as far as I know, no other cases of Typhoid, Diphtheria, or Small-pox during the years 1904-1905. Whooping Cough, however, has been very prevalent for the last six months of 1905, forty-one deaths being registered as resulting from it.

Not much importance can be placed on the "Causes of Death," as only just 10 per cent. are registered as attended by a medical man.

BIRTHS AND DEATHS DURING THE YEARS—

	1904			1905		
	Dist.	H'dorp.	Hanky.	D'st.	H'dorp.	Hanky.
Deaths, European ...	36	3	3	39	3	3
„ Coloured ...	175	12	66	158	15	62
„ Under 1 year ...	63	...	22	70	...	30
Births, European ...	156	16	5	171	14	13
„ Coloured ...	319	16	75	351	32	75
„ Illegitimate, E.	1	...	...	2	...	...
„ „ C.	73	7	17	83	11	14

ABSTRACT OF CAUSES OF DEATH.

	E	C	E	C	E	C	E	C	E	C	E	C
Digestive Tract ...	2	13	...	1	1	8	2	3	...	...	1	2
Respiratory Tract ...	5	23	...	1	...	5	6	13	1	10	...	11
Circulatory „ ...	...	1	2	...	1	1	3	...	...	...	...	1
Kidneys ...	1	1	...	...	...	1	2	...	1	...	...	...
Nervous System ...	1	1	...	1	1	3	2	1	...	...	...	2
Accidents ...	4	4	...	...	...	...	...	5	1	1	2	...
Childbed ...	...	4	...	...	...	2	1	...	...	...	...	...
Phthisis ...	3	45	...	4	...	19	6	37	...	2	...	10
Convulsions ...	5	35	...	1	...	15	9	23	...	1	...	12
Teething ...	...	9	...	1	...	4	...	2	...	...	...	3
Diphtheria and Croup ...	1	1	...	...	...	1	1	...	...	...	...	...
Typhoid Fever ...	...	6	...	...	...	...	...	1	...	...	...	...
Other Causes... /...	7	22	1	2	...	5	5	26	...	1	...	14
Old Age ...	2	10	...	1	...	2	2	7	...	...	...	2
Whooping Cough ...	...	...	...	...	...	...	...	26	...	1	...	14

36. JANSENVILLE.

DR. P. J. HENDERSON, DISTRICT SURGEON.

These years have been so uneventful as regards any epidemic or other very remarkable event, that with the exception of the few statistics I shall give below, it is unnecessary to write more than one report.

The average rainfall for the years 1902-3-4 has been 9·07, which is about normal. Last September we had a deluge, the like of which has not been seen, they tell me, for thirty years, the rainfall for the month reaching actually 7·45 inches. This rain did great damage to property and livestock, besides nearly doing away with the town end of our bridge. During October and December, 1905, we had over an inch of rain in each month, and as a result of this wet season forage and green stuff generally has been cheap and plentiful. In 1905 an outbreak of glanders alarmed the owners of horses in town, and it was followed by a few cases in the District; but the prompt measures taken by the Magistrate and Government Veterinary Surgeon have been quite successful in stamping it out. I heard that there had been another alarm the other day, but on making inquiries was informed that it was a case of Equine Septic Pneumonia.

Jansenville is now the proud possessor of a decent Town Hall, which has as regards ventilation just the one weak point, that the ceiling is rather low and begins too near the top of the windows, a feature easily noticed from outside.

In going over the Causes of Death in a general way I find no out-of-the-way diseases mentioned, and I give these causes from six upwards only to save space, with the exception of Cancer, which always interests.

1904.—Convulsions, 20; Pneumonia, 25; Phthisis, 11; Bronchitis, 11; Influenza, 9; Diarrhœa, 7; Diphtheria, 6; Heart Disease, 4; Accidental, 1; Senile Decay, 1; Cancer, 1.

1905.—Convulsions, 21; Pneumonia, 12; Phthisis, 18; Bronehitis, 6; Influenza, 7; Diarrhœa, 4; Diphtheria, 0; Heart Disease, 6; Accidental, 7; Senile Decay, 6; Cancer, 4.

From this list it will be seen that Convulsions are very common, but “Convulsions” is a very fashionable term supplied by non-medical persons, and therefore we cannot be too sure of it, neither do we get at the cause of the Convulsions, nor the treatment adopted.

Pneumonia is the common cause of “country journeys” during the winter, and I am sure from what I notice could be greatly prevented—except when secondary to Influenza, etc.—if people would wear warm under-clothing, change after work in the heat of the day, and not sit on their stoeps in the cool of the evening in the same clothing as they work with.

Phthisis is largely on the increase, and I should like to see the Town and Divisional Councils make this scourge a notifiable disease within their respective areas. Much has been done with the help of notification to lessen other diseases, and if it was only to keep a list of cases and help statistics, it is justifiable. We have a Sanitary Inspector here as elsewhere, and if he is instructed to tell consumptives how to act for the benefit of others I think it would perhaps lessen the mortality amongst the Natives, who live in locations apart from us, but yet handle our children and food. While I am on this subject I should like to point out the great frequency of spitting here, there and everywhere amongst our people, which of course is wrong, when the spit dries and blows into another person’s mouth or nostrils. This is taken so much notice of in Germany that handkerchiefs even—because when they are put in a warm pocket full of infective spittle are excellent breeding ground for germs—are to be done away with, and in no short time we may hope to see people using paper nose-wipers and depositing in boxes placed at the street corners by order of the Municipal Council. We are, in this respect of filthy handkerchiefs, hundreds of years behind our Japanese allies.

(a) See my report as Acting Medical Officer of Health to the Municipality.

The water-supply is as before, except that a new hole has been bored in the Market Square and an oil engine erected there to pump the water up to a cistern, which will allow a fall enough to pipe the whole village. We have now prospects of an excellent water-supply, and should it fail Messrs. Joseph and Co. can supply 40,000 gallons per diem from the well they have sunk.

Drinking water of all kinds should I think be boiled, because it does away with all danger, comforts the mind and destroys a certain amount of waterhardness.

(b) None.

(c) As before. The Town Council have wisely decided to supply at cost price “Cyllin,” both in liquid and powder form, to the inhabitants, and at all times this should be greatly taken advantage of by us.

(d) I believe overcrowding exists in many houses, and I see buildings being put up that are not a credit to these days.

(e) As before.

(f) Inhabitants selling milk should see that the hands of milkers are thoroughly washed before milking, and also that all milk pails, corks, bottles are under their own supervision, equally well cleansed with boiling water. It is safer to sterilise or boil all milk, but especially that laid aside for infants.

Many reading this report will have noticed the gradual growth amongst our community, after I suppose years of teaching, of boiling their babies' milk, and perhaps this may account largely for our small death-rate from epidemic Diarrhœa.

The word that should be used is not "boiling," but "sterilising" the milk, and I find great diversity of opinion as to whether boiling is sterilising or *vice versa*, etc.

The aim we have in so treating a quantity of milk is really to raise it to such a temperature under pressure that it will be rendered aseptic without interfering with its value as a food—this is sterilising. Now, strictly speaking, boiling quickly to a high temperature kills germs, *i.e.*, sterilises milk, but at the same time it causes changes in the milk, as anyone can see, which interfere with its food value. A cheap homely way of sterilising milk is to thoroughly clean a sodawater bottle, put the milk in it, and instead of a cork, insert a plug of cotton wool into its neck; then place this into your pot of water, and allow to boil 10 to 20 minutes. On cooling, the milk can be kept in the soda bottle instead of decanting into a jug.

(g) There are too many pigs in Location at times. Stable yards require more thorough inspecting.

(h) Good generally.

(i) As before.

(k) Nil.

(l) As before.

(m) No Small-pox and only isolated cases of Diphtheria and Enteric occurred.

Measles was almost unknown until a few months ago a case from Uitenhage infected a few persons here. All the cases under my care had bronchial trouble, but did well; the rash was well marked.

In January, 1904, I vaccinated ten cases as District Surgeon, since then in that capacity I have done none.

37. KENHARDT.

DR. JOS. R. SINTON, DISTRICT SURGEON.

(a) During the period under review the Village Management Board has been active in its efforts to improve the village water-supply.

The Government has again been requested to complete the Driekop Water Scheme, but I regret to report that an unfavourable reply has been received.

The Village Management Board obtained a loan of £200 from the Government, and secured the services of a Government diamond drill. After many and long delays a hole was sunk over ninety feet, but very little water was struck. As it seemed that it would be cheaper and quicker to dig a six-foot well by manual labour than to sink a three-inch hole with the diamond drill, the services of the drill were dispensed with, and a well was commenced. The well was sunk to a depth of thirty-four feet, and a strong supply of water was obtained. The water is somewhat "brak," but compares favourably with much of the water in the District. The well is good enough for cattle, but being of the "shallow" variety is open to all the objections to "shallow" wells. However, "needs must when the devil drives," so it must suffice till the Government completes the Driekop scheme, or supplies a satisfactory drill.

(b) No alteration.

(c) No alteration. The Board tried to organise a satisfactory system, but found it impossible.

(d) No alteration.

(e) During the two years there have been two successful prosecutions under the Public Health Act against butchers.

Everything is now satisfactory.

(f) and (g) Satisfactory.

(h) Unsatisfactory. The veldt remains the general sanitary convenience, and the location generally is dirty.

(i) No alteration.

(k) The old gaol constitutes the greatest nuisance and danger. It has been condemned for the last eight or ten years. During the period under review we have seen the end of the terrible epidemic of Beri-Beri, which commenced in 1903. There were fifteen cases with three deaths during the first half of 1904. The last case (of the epidemic) died on 20th April, 1904; since then there have been three sporadic cases. The first of the three appears alone as Beri-Beri in the gaol register. The remaining two were labelled "Scurvy." All three lived to be discharged from the gaol, but were discharged with constitutions more or less wrecked.

(l) No alteration.

(m) The only cases of infectious disease notified for the two years were five cases of Chicken-pox and two cases of Diphtheria. The two cases of Diphtheria occurred in March, 1905, in the village of Kenhardt. Both were Europeans; one died. The Board did everything necessary for preventing the spread of the disease.

No cases of Measles have occurred.

Eighty-eight vaccinations have been performed by me during the two years, and of these forty-seven are known to have been successful.

38. KIMBERLEY.

(i) KIMBERLEY.

DR. WM. W. STONEY, DISTRICT SURGEON.

In the Circular Letter No. 67 of 1905, dated 19th December, 1905, from the Colonial Secretary's Office, which reached me on February 14th, 1906, I notice that the Under Colonial Secretary, in calling for Reports on the Public Health for the calendar years 1904 and 1905, states that "unless the conditions prevailing during each of the two years have been markedly different, the whole period may be dealt with in one report, but in that case the year of occurrence of any important event should be clearly indicated in the report."

The most important event from a public health point of view was an outbreak of Small-pox during the year 1905. This will be dealt with separately, otherwise in the different matters dealt with, this report will cover the whole of the two years.

Regarding the sanitary matters dealt with in the first ten sections of this Circular, I have but little to add to my report for the year 1902.

(a) The Water-supply.—It is usual when the Vaal River, from which the supply is obtained, runs but slowly during a long period of drought, for the water, which is delivered through the mains, to be far from clear, but towards the close of the year 1905 this condition became exceptionally bad, owing, I am informed, to the presence of algæ in the reservoir, which partially choked and grew in the sand filter beds, and interfered with their proper action, thus allowing suspended matter to pass through into the service reservoir and the mains in large quantity.

More vigorous and effectual measures for purifying and clarifying the water supply are necessary, for this unsatisfactory state of affairs still exists—(March, 1906).

The copper sulphate treatment for algæ in many large reservoirs, which has been so favourably reported upon in bulletins published by the Bureau of Plant Industry of the United States Department of Agriculture, is worthy of serious consideration.

A water tower to increase the pressure for the supply of the higher parts of the town was completed last year.

(b) There has not been any extension of the sewerage or drainage schemes.

(c) The slop-water and household refuse are removed by the Borough Council, and from January 1st, 1906, the Council took over direct control of the removal of night-soil, work which had been performed by a contractor for many years. There has been no change in the methods of removal or final disposal.

(e) No further steps have been taken regarding the erection of a public abattoir, which I have strongly advocated on several occasions.

(h) The Native Locations are improving in orderliness and general cleanliness, and additional sanitary conveniences have been erected. It is, however, disgraceful that so many natives should be allowed to occupy rooms in the township of a very low standard regarding cleanliness and sanitation.

(i) The old cemetery at the lower end of Stead Street, excluding the portion used as the Jewish Burial-ground, was closed on March 31st, 1905, by Governor's Proclamation, dated September, 1904.

(l) With regard to the question of Hospital accommodation for the isolation and treatment of infectious diseases, the local Board of Health secured in July, 1904, a small house on the outskirts of the town, near Otto's Kopje, which they still continue to rent. The house contained seven beds for European patients in one large room and two smaller ones. Iron buildings were erected in the grounds, giving accommodation for four native patients—two male and two female. The Board of Health also acquired in 1904 a large site in the neighbourhood of the Small-pox Lazaretto, with a view to erecting larger and more permanent accommodation for the isolation of cases of infectious disease, but this scheme remains in abeyance at present.

(m) The following infectious diseases have been notified to the Board of Health during the years under consideration:—

			Europeans.		Coloured.		Total.	
			1904.	1905.	1904.	1905.	1904.	1904.
Small-pox	...	...	—	33	—	219	—	252
Enteric Fever	...	...	63	43	50	21	113	64
Diphtheria	...	...	12	19	4	5	16	24
Scarlet Fever	...	...	23	158	1	12	24	170
Erysipelas	...	...	43	9	44	37	87	46
Puerperal Fever	...	...	2	1	5	3	7	4
Leprosy	...	...	1	—	7	3	8	3

Small-pox.—During the year 1904 the District was free from Small-pox, but in 1905 there was an extensive outbreak of this disease.

On May 9th I was requested by Dr. Reid, Medical Officer to the Board of Health, to see with him at Green Point Location, Beaconsfield, a number of cases of sickness with an eruption on the skin, as to the nature of which he was in doubt. I examined a dozen of the cases and came very definitely to the conclusion that the outbreak was one of Small-pox, which opinion I expressed to Dr. Reid at the time and to the Chairman of the Board of Health later in the day, and confirmed the same at once in writing.

Next day, May 10th, I commenced vaccination and re-vaccination in this location, and within ten days 1,750 Native were vaccinated at the location and 670 at the Court House, Beaconsfield. By the end of June I had performed over 4,000 vaccinations at the Court Houses, and the locations in Kimberley and Beaconsfield.

Towards the end of July the numbers commenced to increase, and early in August (*vide* Government Notice, 31st July, 1905), vaccination and re-vaccination were made compulsory throughout the District; the townships were divided into twelve areas, a centre fixed in each, and dates advertised on which the District Surgeon would attend to perform vaccination free. This work commenced on August 16th, and took over a month to complete. The outbreak of Small-pox died out shortly after these vigorous measures had been carried out as the following table shows, and one can but attribute this in no small measure to the extensive vaccination performed:—

COMPULSORY VACCINATION.

Fortnight ending	No. of cases notified.	Week ending	No. Vaccinated.
May 20	50	August 22	1,085
June 3	46	August 29	645
June 17... ..	16	September 5	1,044
July 1	4	September 12	868
July 15	16	September 19	2,346
July 29	27	September 30	639
August 12	20		
August 26	24		
September 9	27		
September 23	19		
October 7	1		
October 21	2		
Total number of cases			252

The cases of Small-pox were isolated and treated by the officials of the Board of Health. There were 252 cases, of which 33 were Europeans and 219 Coloured patients; of the latter seven died. Eleven cases (one European and ten Coloured) occurred at Wedberg, a camp of river diggers on the Vaal opposite Windsorton; the remainder of the cases occurred in the townships of Kimberley and Beaconsfield.

The total number of persons vaccinated in 1904 was 2,664. In 1905 the total was 12,546. Until July, 1905, the vaccine lymph was obtained from Grahams-town Bacteriological Institute, after that date from the Public Health Laboratory of the Medical Officer of Health for the Colony. As a rule one only sees a small proportion of the cases vaccinated on the eighth day, for the simple reason that they decline to attend for the mere purpose of inspection. During the period of compulsory vaccination one had a better opportunity of observing the results which varied considerably with the different lymphs used on which a special report was furnished at the time; it certainly appears advisable to mix different lymphs when vaccinating large numbers of persons in order to obtain uniform successful results.

Enteric Fever.—The year 1905 shewed the smallest number of cases since compulsory notification was introduced.

Year.	Europeans.	Coloured.	Total.
1898 (from February 19)	67	49	116
1899	112	60	172
1900	552	164	716
1901 (excluding Refugee Camp)	84	87	171
1902	68	84	152
1903	59	35	94
1904	63	50	113
1905	43	21	64

Diphtheria.—The following comparative table shews the numbers of cases notified. This disease, like all other of an infectious nature, is investigated by the Medical Officer to the Board of Health, whose report is printed and published annually:—

Year.	Europeans.	Coloured.	Total.
1898 (from February 19)	21	6	27
1899	34	17	51
1900	27	5	32
1901 (excluding Refugee Camp)	16	2	18
1902	15	5	20
1903	7	1	8
1904	12	4	16
1905	19	5	24

Scarlet Fever.—There was an outbreak of this disease in 1905, but fortunately the disease is almost always of a mild character.

Year.	Europeans.	Coloured.	Total.
1898 (from February 19)	28	7	35
1899	77	5	82
1900	56	9	65
1901	25	6	31
1902	10	1	11
1903	12	3	15
1904	23	1	24
1905	158	12	170

Erysipelas.—In my report for 1903 I pointed out that this disease of a severe type was prevalent during the year, and urged that it should be proclaimed a notifiable disease under the 1897 Public Health Act. This was done in April, 1904. During 1903 the Board of Health had erected a small house in the town in which destitute cases of this disease were isolated and treated; since July, 1904, these cases have been treated in the temporary isolation hospital before mentioned. The following are the numbers of these cases notified during the two years under consideration:—

Year.	Europeans.	Coloured.	Total.
1904	43	44	87
1905	9	37	46

Tuberculosis.—The spread of this disease in recent years especially amongst the Coloured and Native portions of the population is a fact observed by all the medical practitioners in this District. It is a serious matter, for the Coloured portion of the population will certainly re-act as a source of danger to the Europeans in this respect. This disease was proclaimed to be notifiable in March, 1903, but the Local Authority, the Board of Health, has not encouraged the adoption of this procedure, and consequently there are no reliable data to work upon.

Measles is a disease specially mentioned in the Under Colonial Secretary's circular calling for this report. This disease was certainly very prevalent during the latter part of 1905, and the advisability of prolonging the midsummer holidays at the schools for a week was suggested—a measure which in my opinion would have been entirely inefficacious and only have considerably interfered with the routine of the schools—but this was not adopted. As this disease is not a notifiable one there are no statistics available. In my experience it is a more serious disease than Scarlet Fever in the up-country districts; it should be similarly investigated and disinfection, etc., carried out; measures which cannot be adequately enforced until the disease is proclaimed a notifiable one.

Leprosy.—During the year 1904 there were eight Lepers (one European and seven Coloured, all males), and during 1905 there were also eight (one European and seven Coloured, all males), reported upon and removed to Robben Island from this District. During the last four years I have repeatedly called attention to the considerable delay before Lepers are removed, and the absence of any provision for the isolation of these patients pending the arrival of authority for their removal, but nothing has been done, neither to expedite removal nor to make local provisional accommodation for them.

Lunacy.—During the year 1904 there were 28 persons certified in this District as of unsound mind, a decrease on the previous year as the following table shews. In the year 1905 there was a further slight decrease:—

	Europeans.		Coloured.		Total.
	Males.	Females.	Males.	Females.	
1902	13	5	20	15	53
1903	7	2	20	3	32
1904	8	2	9	9	28
1905	5	3	11	8	27

The difficulty regarding prompt removal of these cases still continues, though this has not been so marked during the years under consideration as in the two previous years. During 1904 the maximum period of detention awaiting removal amongst the twenty-four cases which passed through the Gaol Hospital was six weeks, the average stay twelve days, and the average of the nine cases detained over ten days was twenty days.

During 1905 there were also twenty-four cases passed through the Gaol Hospital, the maximum period of detention here being thirty-eight days, the average 11.15 days, and of the eight cases detained longer than ten days, the average was twenty-three days.

This is an improvement, but it can not be considered satisfactory, as I have frequently pointed out; but, at the risk of appearing importunate, I must again emphasise the great necessity of promptly removing these patients suffering from acute mental disorders, to suitable surroundings for their proper treatment, whilst in the early stages, when recovery can be most hopefully expected.

In addition to the above a large and increasing number of cases, as the accompanying table shews, were detained in the Gaol Hospital for temporary observation regarding their mental condition.

	Europeans.		Coloured.		Total.
	Males.	Females.	Males.	Females.	
1902	—	—	—	—	12
1903	5	1	15	1	22
1904	3	—	8	6	17
1905	6	—	20	6	34

These cases, after a few days' observation, proved to be suffering from temporary mental aberration, due usually to alcoholism or dagga smoking, this latter habit is a growing factor in the causation of mental disorders.

With regard to the working of Part II. of the Contagious Diseases Prevention Act, 1885, in this District, the following table shows the cases that have been admitted to Hospital for treatment during the years 1902-1905, inclusive:—

	Europeans.		Coloured.		Total.
	Males.	Females.	Males.	Females.	
1902	27	2	251	75	355
1903	19	4	121	55	199
1904	11	2	143	36	192
1905	19	1	151	30	201

These figures refer simply to the cases treated as pauper patients in the Contagious Diseases Wards of the General Hospital, but give no indication of the numerous patients treated privately by medical practitioners, those probably more numerous cases treated by chemists and other unqualified persons, or who treat themselves, acting on the advice of some “experienced” friend, and finally there are those who receive no treatment whatever.

As stated in my report for 1903, accommodation was provided at the Hospital, at a cost of £3,500, for 17 Europeans and 50 Coloured male patients. During the early part of 1904, at a cost of £2,000, accommodation, which might be described as luxurious compared with the old wards, was provided for 8 Europeans and 16 Coloured female patients and for six children. Yet there is no doubt, as I think every medical man here will admit, we are not striking at the root of the evil, and really doing but little to eradicate the disease.

From the above table it will be seen that only one-quarter to one-sixth of the cases occurred in women; it is to the thorough treatment of these diseases in females as well as in men that we must look to if the diseases have to be adequately dealt with.

In my report of the year 1902, I pointed out that the prevalence of these diseases had become so serious that the advisability of putting Part I. of the Contagious Diseases Act into force in this District should be considered, especially if this measure has proved practically useful in diminishing the prevalence of these diseases in other towns of the Colony where it has been enforced—I am still of the opinion that some such serious measure should be taken in the endeavour to check the spread of these diseases, and strongly advise that the matter should receive earnest consideration without further delay.

(ii) SUB-DISTRICT OF WARRENTON.

DR. E. N. DAWSON, ADDITIONAL DISTRICT SURGEON.

(a) The irrigation furrow has been largely enclosed in the lower portions where animals are most accustomed to congregate, and the danger of pollution from their presence on the banks or in the stream from which many householders obtain their water-supplies has been reduced.

(b) and (d) Nil.

(c) No alteration.

(e) A considerable number of Natives are attracted to the operations at one slaughter-house near the location. Possible contamination from their congregation in too close proximity to the carcasses, and from the indiscriminate assistance rendered to the officiating boys, should be prevented by the slaughter poll being enclosed and reserved to those actually engaged. Smocks might also with advantage be provided for those handling the carcasses.

(f) and (g) Nil.

(h) Habitations of a more substantial type are being erected in greater numbers, affording a much-needed better protection against the elements for the inmates.

(i), (k) and (l) Nil.

(m) Four cases of Diphtheria amongst Europeans occurred during the year 1904. The source of infection in the primary case was obscure, the others occurring in persons actually in contact with the child first affected. No fatal results occurred.

Three cases of Erysipelas occurred during 1904. The disease was probably contracted in the case of the first patient on a visit to Kimberley, where it was then very prevalent. The second case arose from the first. Both the above were Euro-

peans. In the last instance a Native woman residing in the location and suffering from Tertiary Syphilitic Lesions of the Nasal Cavities, contracted the complaint at a subsequent date. The source of infection was obscure. No fatal results occurred.

One case of Enteric Fever was discovered in December, 1904. The source of infection was obscure. Recovery followed.

One case of Puerperal Fever occurred in January, 1905, in a woman removed from across the Transvaal border. Death ensued.

One case of Leprosy in a male Native adult was notified during 1905, but the patient died before he could be removed. No definite source of infection could be traced.

All the above cases were isolated and quarantined at their houses.

39. KING WILLIAM'S TOWN.

(i) KING WILLIAM'S TOWN.

DR. HENRY M. CHUTE, DISTRICT SURGEON.

(a) The rainfall for 1904 was 19.41 inches with 72 days of rain, and for 1905 was 32.35 inches with 103 days of rain. During October, 1905, 8.71 inches fell, causing heavy floods and serious damage. The river rose to a height unknown before, save once, during the floods of 1874. The water supply during periods of average rainfall is amply sufficient, but during periods of long absence of rain, the supply has to be curtailed and shut off at night to prevent waste by garden irrigation.

The quality of the water is deteriorating, very frequently now after thunderstorms and showers the water issuing from the service pipes is muddy and discoloured. This is believed to be owing to so much more land being cultivated near the banks of the river above the intake dam. Thunderstorms wash off the ploughed earth into the dam, whence it finds its way into the service pipes. There is yet no system of filtration or sedimentation tanks in connection with the present service.

The Town Council have resolved upon instituting a new water supply for the town, by building a dam across another of the head streams of the Buffalo River, in the catchment area of which are no Native Locations or cultivated lands. The stream issues from the forest near the site of the proposed dam. The head of water obtainable at this new site will be 200 feet higher than the level of the present dam. Consequently much land on the higher level of the town will become available for building sites. In connection with the new scheme there will be polarite filters, a most important and necessary addition, and a new service reservoir, capable of holding 750,000 gallons.

The Native Locations of Ginsberg and Tsolo are now supplied from the town service, and the people are no longer dependent upon the river and furrow water for their drinking supply.

(b) The drainage scheme initiated some years ago is still steadily being carried on; most of the streets are laid with good stone drains and concrete channels, which deal effectively with washing and bath waters and also with storm-water. The increased water-supply will enable a regular flushing of the drains to be made, and will minimise the evils arising from the only method now available of dealing with slop-water, viz., by pouring it into the open gutters. To remove the evil entirely a system of removal of urine and dangerous slops must be provided.

(c) The disposal of night-soil and slops.—It is now more necessary than ever, in my opinion, that a system of removal should be undertaken by the Council. The soil around dwelling houses is constantly and continuously fouled day by day by this method of disposal of these dangerous fluids. This soil pollution is, I feel convinced, responsible for much of the Enteric Fever and Diarrhœa which has been prevalent.

The system of night-soil removal works admirably, it is devoid of nuisance, and the system is well carried out. The plantation of timber trees at the sanitary trenches, where the night-soil is deposited, continues to thrive, and is year by year becoming a more valuable asset.

(d) Overcrowding.—There are many houses in town where Natives are allowed to live in communities, and overcrowding undoubtedly exists. By the Census figures of 1904, the number of Natives and Coloured people living in town was 1,631. So long as Natives are permitted to reside in town overcrowding cannot be prevented. The Standard Regulations passed under Sections 7 and 9 of the Public Health Act, were proclaimed on November 4, 1904, and are now in force in King William's

Town. It is to be hoped that the Municipal Council will use the powers given under the Regulations to prevent the nuisances caused by Natives and Coloured people living in the town side by side with Europeans. Surprise night visits are occasionally made, and prosecutions are undertaken.

(e) I am pleased to be able to report that the new slaughter-houses have, since my last report, been opened, and are now in use. They are fitted with all modern improvements, have an ample supply of water and good cement floors and excellent drainage. Within the Municipal area no slaughtering of animals is permitted at any other place, and thorough supervision of stock and meat is now rendered possible.

(h) The Council is taking steps to concentrate the Natives and Coloured people in one large location—Ginsberg's—which is increasing year by year. At the same time no new licences or permits for building huts in other locations are issued. The huts are erected by the Council, according to a definite regular plan. They are large and roomy, allowing ample ventilation.

(i) The cemetery continues to be admirably managed by a local Board, and is well situated.

(k) The abatement of nuisances is dealt with by frequent inspections of the town by two Sanitary Inspectors.

(m) During the year 1905 eight cases of Bubonic Plague were notified, and there were four deaths. The outbreak was dealt with by a special staff of Doctors and Disinfecting Staff, and was under the direct control of the Medical Officer of Health for the Colony. The Plague Camp here was not opened. All patients whose condition would permit were removed in a special ambulance coach to the Plague Camp at East London. Extensive disinfection operations were systematically undertaken, and an active crusade against rodents was waged. In consequence of the thorough and vigorous measures adopted, the outbreak was soon controlled and subsided.

Enteric Fever, as in all large Colonial towns, is endemic all the year round. During 1904 72 European and 30 Coloured cases were notified, with 5 European and 8 Coloured deaths. During 1905 there were 59 European and 17 Coloured cases notified, with 10 European and 7 Native deaths.

This outbreak was made the subject of a special investigation and report, and analyses were made of all cases occurring during years 1901 and 1905 inclusive. From this table it was shown that Enteric Fever occurred most frequently in the low-lying parts of the town, where sub-soil soakage was greatest. It rarely happened that many persons were affected in the same house, a circumstance affording strong probability that the water-supply cannot be held responsible.

The Gaol enjoys remarkable freedom from any outbreaks of Enteric, although cases may be frequent in town.

There are very few places, if any, in the town, where so many human beings are congregated together day by day in relatively so small an area as in the Gaol, yet Enteric Fever is unknown among the prisoners. The water-supply is the same as is supplied to the town; there is however an entire absence of soil pollution, the drainage is as good as can be, and in this fact lies, I believe, the secret of the freedom of the inmates of the Gaol from any Enteric outbreaks. A special Bacteriological Examination of the soil, from various parts of the town where Enteric had prevailed, was made by the Director of the Bacteriological Laboratory at Grahamstown, Dr. Edington, and the result showed the soil to be highly contaminated with *B. coli* and Enteritides. I do not believe that the town will ever be free from Enteric until the continual pollution of the soil by the present method of disposal of slops is abandoned. As mentioned in my last year's report, during the extensive and thorough disinfecting operations undertaken during the Plague epidemic, there was a remarkable diminution, and for some period an absence of cases of Enteric, which I believe to have been due to the destruction of the micro-organisms in the soil by the strong perchloride of mercury solutions used.

During 1904 a rather extensive outbreak of a modified form of Small-pox occurred at Frankfort and isolated cases in other parts of the District. Vaccination was thoroughly carried out, and the outbreak soon died out.

Measles has been very prevalent in the town and District during 1905. The chief cause of the spread of the disease is the carelessness of parents in allowing their children to attend the Public Schools in the early stages of the disease. From Measles five European and four Natives deaths have been recorded, and of the 36 cases of deaths of Europeans and Natives registered as due to Bronchitis and Pneumonia, many of them are probably due to Measles as the exciting cause.

I append tables of Mortality of all Deaths, European and Native, registered during years 1904 and also during 1905, with causes of death of each case, and tables of cases of Infectious Diseases notified.

TABLE OF MORTALITY OF KING WILLIAM'S TOWN, JANUARY 1st TO
DECEMBER 31st, 1904.

Including Europeans from Town and Hospital. Natives from Town, Hospital, Brownlee Station, Tsolo, Ginsberg, and Bidhli Locations, compiled from Register of Deputy Registrar of Births and Deaths.

EUROPEAN—TOWN AND HOSPITAL.													NATIVES. TOWN.—Brownlee Station; Tsolo, Ginsberg and Bidhli Locations. Nos. at different ages.																
Numbers at different ages.																													
													Infancy.	Childhood.	Adults.	Total.	Grand Total.												
													1 to 5.	5 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	Over 70.	Total.	Infancy.	Childhood.	Adults.	Total.	Grand Total.		
CLASS I.—DISEASES DUE TO SPECIFIC ORGANISMS.																													
SUB-CLASS.—Zymotic Diseases.																													
Whooping Cough ...																							14	2		16	16		
Croup ...													1	3	2			1				7	4	1		5	12		
Enteric Fever ...																1	3		1			5		2	6	8	13		
Infantile Cholera ...													2	1								3		1		1	4		
Diarrhoea ...													2	2							2	6	5	3	1	9	15		
Dysentery ...													1							1	2	4	2	2	1	5	9		
Tuberculosis ...														1					1		2		1	1	2	4			
(a) Phthisis ...																													
(a) Pulmonalis ...																3	1	1		1		6		2	20	22	28		
(b) Tabes Mesenterica ...																							1			1	1		
Diabetes ...																		1			1					1	1		
Beri Beri ...																								1	1	1	1		
Tetanus ...													2								2					2	2		
Syphilis ...																							1	1	2	2			
Diphtheria ...																							1		1	1			
Measles ...														1							1					1	1		
Pyæmia ...																							1		1	1			
Scarlet Fever ...																							1		1	1			
Influenza ...																							2		2	2			
CLASS II.—Dietetic Diseases and Chronic Poisons.																													
Alcoholism ...																	2	1			3					3			
Inanition ...													1								1		2			2	3		
CLASS III.—Constitutional Diseases.																													
Cancer ...																				2	2		2	1	3	5			
CLASS IV.—Developmental Defects and Degeneration.																													
Premature Births ...													7								7		3			3	10		
Congenital ...													2								2						2		
Old Age ...																				5	5			2	2	7			
CLASS V.—LOCAL DISEASES.																													
SUB-CLASS I.—Diseases of Nervous System.																													
Meningitis ...													2	1							3					3			
Convulsions ...																							4	1		5	5		
Epilepsy ...																								1		1			
Softening of Brain...																			1		1					1			
Paralysis ...																			1		1					1			
Hæmorrhage, Spinal Cord ...																							1		1	1			
SUB-CLASS 3—Diseases of Circulatory System.																													
Syncope ...													1							1	2			1	1	3			
Heart Disease ...															1	1	1	1		1	5			6	6	11			
SUB-CLASS 4—Diseases of Respiratory System.																													
Pneumonia ...													1				1	1	1	1	6		2	4	2	8	14		
Bronchitis ...													2		1				2		5		6	8	1	15	20		
Laryngitis ...														1							1					1			
Pleurisy ...																								1	1	2	2		
SUB-CLASS 5—Diseases of Alimentary Canal.																													
Peritonitis ...																1				1				4	4	5			
Gastro Enteritis ...													3	1		1					5			1		6			
Intestinal Gastritis ...																							2	2		4			
" Obstruction ...																								1		1			
Gastralgia ...																								1	1	2	2		
SUB-CLASS 6—Diseases of Liver.																													
Cirrhosis of Liver ...																			1	1	3					3			
SUB-CLASS 8—Diseases of Urinary System and Organs of Generation.																													
Ovarian Tumour ...																1		1			2					2			
Bright's Disease ...														1							1		1	1	2	3			
Uræmia ...																	1				1			1	1	2			
CLASS VI.—Violence.																													
Drowning...																		1			1			1	1	2			
Burns ...																								1		1			
Injury to Hip ...														1							1					1			
Rail Accident ...																	1				1					1			
Overlaying ...																							1		1	1			
Poison, Laudanum ...																		1			1					1			
Suicide, Dynamite ...																			1		1					1			
TOTAL ...													27	13	2	3	10	9	8	7	9	11	99	48	42	59	143	242	

SUMMARY FOR JANUARY 1st TO DECEMBER 31st, 1904.

During the year—

Burials in Public Cemetery and in Cemeteries of Tsolo, Ginsberg and Bidhli's Locations.

242

Of these

Europeans. Natives.

At various ages

Infancy, 1 and under 27 48

1 to 5 13 42

5 to 10 3 42

10 to 20 2 53

20 to 30 10 53

30 to 40 9 53

40 to 50 8 53

50 to 60 7 53

60 to 70 9 53

Over 70 11 53

Causes of Death.

Eur. Nat. Tl.

Class I.—Zymotic Diseases 37 76 113

Class II.—Dietetic Diseases & Chronic Poisons 4 2 6

Class III.—Constitutional Diseases 2 3 5

Class IV.—Developmental Defects and Degeneration 14 5 19

Class V.—Local Diseases.

Diseases of Nervous System 5 7 12

Diseases of Circulatory System 7 7 14

Diseases of Respiratory System 12 25 37

Diseases of Alimentary Canal 6 12 18

Diseases of Liver 3 0 3

Diseases of Urinary System and Organs of Generation 4 3 7

Class VI.—Violence 5 3 8

99 143 242

POPULATION.

European Returns by Census 5,903

April, 1904.

Natives and Coloured—

In Town 1,631

In Brownlee, Ridsdel 1,234

Ginsberg and Bidhli's Locations 732

3,597

9,500

DEATH RATE PER 1,000.

1904.

Europeans 16.75

Natives 36.97

TABLE OF MORTALITY OF KING WILLIAM’S TOWN, JANUARY 1st TO
DECEMBER 31st, 1904—continued.

NO. OF DEATHS PER MONTH.				Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Europeans	...	...	...	11	10	6	1	4	11	5	14	14	7	5	11	99
Natives	...	...	...	5	10	11	6	7	19	10	13	8	16	17	21	143
Total	...	...	...	16	20	17	7	11	30	15	27	22	23	22	32	242

NOTIFICATIONS OF INFECTIOUS DISEASES, 1904, CLASSIFIED INTO MONTHLY PERIODS AND RACE.

DISEASE.				Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		TOTAL	
				White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.
Enteric Fever	...	...	4	1	7	4	6	0	8	3	6	1	5	5	7	4	9	0	8	3	3	3	1	3	8	3	72	30
Chicken Pox	1	...	4	...	1	...	1	7	...
Total	...	...	4	1	7	4	6	0	8	3	6	1	6	5	11	4	10	0	9	3	3	3	1	3	8	3	79	30
Grand Total ... 109																													

Henry M. Chute, M.R.C.S., L.R.C.P., Ed.,
District Surgeon,
King William’s Town,
August 16, 1905.

Medical Officer of Health.

METEOROLOGICAL OBSERVATIONS TAKEN BY DR. C. J. EGAN, KING WILLIAM’S TOWN, FROM JANUARY 1st TO DECEMBER 31st, 1904.

Lat. 32° 52' S. Long. 27° 23' E. Height above Sea, 1,314 feet.

1904.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total Rainfall January to Dec., 19·41 inches. Days rain fell, 72.	
BAROMETER.														
Highest		
Lowest		
		
THERMOMETER.														
Highest		
Lowest		
Mean		
RANGE IN 24 HOURS.														
Greatest Range		
Least Range		
Mean Range		
RAINFALL.														
Amount in inches		
Days of Rain		

TABLE OF MORTALITY OF KING WILLIAM'S TOWN, JANUARY 1ST TO DECEMBER 31ST, 1905.

Including Europeans from Town and Hospital. Natives from Town, Hospital, Brownlee Station, Tsolo, Ginsberg, and Bidhli Locations, compiled from Register of Deputy Registrar of Births and Deaths.

CLASS I.—DISEASES DUE TO SPECIFIC ORGANISMS.	EUROPEAN—TOWN AND HOSPITAL.											NATIVES. TOWN.—Brownlee Station ; Tsolo, Ginsberg and Bidhli Locations.				
	Numbers at Different Ages.											Numbers at different ages.				
	Infancy.	1 to 5.	5 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	Over 70.	Total.	Infancy.	Childhood.	Adults.	Total.	Grand Total.
SUB-CLASS.— <i>Zymotic Diseases.</i>																
Measles	1	3	...	1	...	...	...	...	...	...	5	1	3	...	4	9
Influenza ... ..	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1
Whooping Cough	1	...	...	...	...	...	...	...	...	...	1	4	6	...	10	11
Diphtheria and Membranous Croup ... ..	...	...	...	...	...	...	...	...	...	...	...	3	1	...	4	4
Typhoid (Enteric Fever) ... ..	...	2	2	2	2	...	1	1	...	...	10	1	3	3	7	17
Diarrhoea	4	2	...	...	...	...	...	...	1	...	7	9	11	1	21	28
Dysentery	1	...	...	...	...	...	...	...	...	...	1	...	2	...	2	3
Tuberculosis	1	1	...	...	3	2	...	...	...	...	7	4	2	2	35	42
Leprosy ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
Syphilis ... ..	...	...	...	...	...	...	1	...	...	...	1	1	...	...	1	2
Tetanus ... ..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
Oriental or Bubonic Plague ... ..	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4	1
CLASS II.— <i>Dietetic Diseases and Chronic Poisons.</i>																
Starvation, want of Breast Mil	1	...	...	...	...	...	...	...	...	...	1	5	...	...	5	6
CLASS III.— <i>Constitutional Diseases.</i>																
Rheumatic Fever, Rheumatism of Heart ... ..	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1
Cancer (Malignant Disease) Carcinoma ... ..	...	...	...	...	...	...	1	...	2	...	3	...	2	...	2	5
CLASS IV.— <i>Developmental Defects and Degeneration.</i>																
Premature Births	4	...	...	...	...	...	...	...	...	...	4	...	...	...	...	4
Accidents during Birth	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Dentition ... ..	...	...	...	...	...	...	...	...	...	...	...	2	1	...	3	3
Old Age (Senile Decay) ... ..	...	...	...	...	...	...	...	...	8	...	8	...	1	...	1	9
CLASS V.—LOCAL DISEASES.																
SUB-CLASS 1— <i>Diseases of Nervous System—</i>																
Inflammation of Brain or its Membranes ... ..	...	...	...	1	...	...	...	...	1	...	2	...	2	...	2	4
Locomotor Ataxia ... ..	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	1
Convulsions	2	...	...	...	...	...	...	...	...	...	2	10	3	1	14	16
SUB-CLASS 2—																
Diseases of the Ear ... ..	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1
SUB-CLASS 3— <i>Diseases of Circulatory System—</i>																
Heart Disease ... ..	...	...	...	...	1	...	...	1	1	1	4	...	3	3	7	7
Cerebral Haemorrhage (Apoplexy) ... ..	...	...	...	...	1	...	...	...	...	...	1	...	3	3	4	4
Senile Gangrene ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
SUB-CLASS 4— <i>Diseases of Respiratory System—</i>																
Asthma Emphysema ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1
Bronchitis ... ..	...	3	1	...	...	...	...	...	1	...	5	8	6	1	15	20
Pneumonia ... ..	...	2	...	...	1	...	...	2	...	...	5	5	3	3	11	16
Congestion of Lungs ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1
SUB-CLASS 5— <i>Diseases of Alimentary Canal—</i>																
Enteritis, Gastro Enteritis	9	3	1	...	...	...	...	...	...	...	13	8	4	4	16	29
Hernia, Intestinal Obstruction ... ..	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	2
SUB-CLASS 6— <i>Diseases of Liver—</i>																
Cirrhosis of Liver ... ..	...	...	...	1	...	...	...	...	...	...	1	1	...	...	1	2
SUB-CLASS 7—																
Lymphadenoma ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1
SUB-CLASS 8— <i>Diseases of Urinary System and Organs of Generation—</i>																
Chronic Nephritis (Bright's Disease) ... ..	...	...	...	...	...	...	1	...	...	...	1	1	...	1	2	3
Diseases of Bladder and Prostate ... ..	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1
SUB-CLASS 9—																
Diseases of Parturition ... ..	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	1
CLASS VI.— <i>Violence—</i>																
Burns, Scalds, Injuries ... ..	...	...	...	...	...	...	...	...	1	...	1	1	2	3	6	7
Drowning ... ..	...	...	...	...	...	...	1	1	...	...	2	...	...	...	...	2
Suffocation ... ..	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2	2
Poisons ... ..	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2
CLASS 7— <i>Ill-defined or not specified—</i>																
Dropsy, Anasarca ... ..	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2	2
Unknown ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1
TOTAL	30	12	5	5	8	3	3	8	4	15	93	67	47	72	186	279
SUMMARY FROM JANUARY 1ST TO DECEMBER 31ST, 1905.																
During the year—																
Burials in Public Cemetery and in Cemeteries of Tsolo, Ginsberg and Bidhli's Locations } 279																
Of these																
At various ages. Europeans. Natives.																
Infancy 1 & under 30 67																
1 to 5 ... 12 }																
5 to 10 ... 5 }																
10 to 20 ... 5 }																
20 to 30 ... 8 }																
30 to 40 ... 3 }																
40 to 50 ... 3 }																
50 to 60 ... 8 }																
60 to 70 ... 4 }																
Over 70 ... 15 }																
93 186 279																
Causes of Death. Europ. Nat. Tl.																
Class I—Zymotic Diseases 33 90 123																
Class II—Dietetic Diseases & Chronic Poisons 1 5 6																
Class III—Constitutional Diseases ... 4 2 6																
Class IV—Developmental Effects and Degeneration ... 13 4 17																
Class V—Local Diseases—																
Diseases of—																
Nervous System ... 5 16 21																
Special Senses (Ear) 1 0 1																
Circulatory System ... 5 7 12																
Respiratory " ... 10 28 38																
Alimentary Canal ... 14 17 31																
Liver ... 1 1 2																
Lymphatic System ... 0 1 1																
Urinary System and Organs of Generation ... 2 2 4																
Parturition ... 1 0 1																
Class VI—Violence ... 3 10 13																
Class VII—Ill-defined or not Specified ... 0 3 3																
93 186 279																
POPULATION.																
European Returns by Census, April, 1904 ... 5,903																
Natives and Coloured —																
In Town ... 1,631																
In Brownlee, Ridsdel ... 1,234																
Ginsberg and Bidhli's Locations ... 732																
3,597																
9,500																
DEATH RATE PER 1,000.																
1905.																
Europeans ... 15.75																
Natives ... 51.70																

SUMMARY FROM JANUARY 1ST TO DECEMBER 31ST, 1905.

During the year—			
Burials in Public Cemetery and in Cemeteries of Tsolo, Ginsberg and Bidhli's Locations	279		
Of these			
At various ages. Europeans. Natives.			
Infancy 1 & under 30	67		
1 to 5	12		
5 to 10	5		47
10 to 20	5		
20 to 30	8		
30 to 40	3		
40 to 50	3		72
50 to 60	8		
60 to 70	4		
Over 70	15		
	93	186	279

Causes of Death.	Europ.	Nat.	Tl.
Class I—Zymotic Diseases	33	90	123
Class II—Dietetic Diseases & Chronic Poisons	1	5	6
Class III—Constitutional Diseases ...	4	2	6
Class IV—Developmental Effects and De- generation ...	13	4	17
Class V—Local Diseases— Diseases of—			
Nervous System ...	5	16	21
Special Senses (Ear)	1	0	1
Circulatory System ...	5	7	12
Respiratory ...	10	28	38
Alimentary Canal ...	14	17	31
Liver ...	1	1	2
Lymphatic System ...	0	1	1
Urinary System and Organs of Genera- tion ...	2	2	4
Parturition ...	1	0	1
Class VI—Violence ...	3	10	13
Class VII—Ill-defined or not Specified ...	0	3	3
	93	186	279

POPULATION.

European Returns by Cen- sus, April, 1904 ...	5,903		
			5,903
Natives and Coloured —			
In Town ...	1,631		
In Brownlee, Ridsdel ...	1,234		
Ginsberg and Bidhli's Locations ...	732		
			3,597
			9,500

DEATH RATE PER 1,000.

	1905.
Europeans ...	15.75
Natives ...	51.70

Table of Mortality of King William's Town, January 1st to
December 31st, 1905.—*Continued.*

NO. OF DEATHS PER MONTH.					January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Europeans	...	...	...	...	6	13	8	9	7	5	8	7	1	12	9	8	93
Natives	...	...	...	...	17	16	20	21	22	13	16	14	5	13	12	17	186
Total	...	...	...	...	23	29	28	30	29	18	24	21	6	25	21	25	279

Notifications of Infectious Diseases, 1905, Classified into Monthly
Periods and Race.

DISEASE.			Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Total.			
			White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.		
Enteric Fever ...	...	...	4	1	2	0	6	1	26	4	6	2	5	5	2	1	0	3	1	0	0	0	6	0	1	0	59	17	76
Scarlet Fever ...	...	...	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
Plague ...	...	...	0	0	0	0	0	0	1	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7	8	
Diphtheria ...	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	2	
			5		2		9		37		8		12		3		3		1		2		6		1		65		89	

HENRY M. CHUTE, M.R.C.P., L.R.C.P., ED.,

District Surgeon,

King William's Town,

Medical Officer of Health.

March 26, 1905.

Meteorological Observations, taken by Dr. C. J. EGAN, King
William's Town, from January 1st to December, 31st, 1905.

Height over Sea, 1.314 feet. Lat. $32^{\circ} 52' S$. Long. $27^{\circ} 23' E$.

1905.	JAN.	FEB.	MAR.	APRIL	MAY.	JUNE.	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
BAROMETER.												
Highest	28·92	29·15	29·12	29·07	29·11	29·03	29·22	29·17	29·08	29·03	29·10	28·95
Lowest .. .	28·40	28·55	28·44	28·70	28·53	28·50	23·67	28·57	28·46	28·60	28·57	28·46
THERMOMETER.												
Highest	101°	105°	105°	95°	95°	80°	85°	91°	91·5	97°	105°	111°
Lowest	55°	50°	48°	45°	35°	32°	47°	32°	37°	44°	53°	50°
Mean	73·5	71·5	69·5	69°	59·7	53·7	53·5	56·7	61·5	62°	64°	61·5
RANGE IN 24 HOURS.												
Greatest Range... ..	40°	37°	47°	40·5	43°	38·5	41°	41°	39°	47°	34°	44°
Least Range	12°	8°	8°	7°	10°	10°	18°	7°	6°	6°	18°	10°
Mean Range	21·5	21°	25·5	24°	23·5	24·5	31·5	26°	22°	23°	24°	23°
RAINFALL.												Total Rainfall, 1905—32·35 inches.
Amount in inches	0·59	3·47	1·64	2·59	1·81	2·64	0·20	1·40	4·20	8·71	1·36	3·23 Days rain fell, 103.
Days of Rain	9	10	12	7	5	6	3	5	16	7	10	15

(ii) SUB-DISTRICT OF KEISKAMA HOEK.

DR. D. C. McARTHUR, ADDITIONAL DISTRICT SURGEON.

(a) I am glad to be able to report that one of the first actions of the new-fledged Municipality was to prohibit all washing in the actual rivers within their bounds, and that they have seen that this is observed. This also applies to the open water-furrow supplying the town, which is now in process of being fenced, a much needed protection from wandering animals. Prosecution of a Hottentot for washing night-soil buckets in this furrow also occurred. As this is the chief water-supply of the town, except for private tanks, and it is obtained from one of the rivers, the higher tributaries of which are involved in the East London Water Scheme now going before Parliament, it is to be hoped that due compensation both in furrow and river as regards water, will be secured, and it is to be hoped will lead to the necessary piping of the supply.

The purity of this Gxulo River and also the Wolf, another river contemplated to be tapped in the scheme, is very high according to analysis, notwithstanding the large number of Natives living on the catchment areas.

St. Matthew's Mission is a fairly large community during school periods, and draws its water-supply from an open furrow. The veldt around it is much polluted by the Native scholars, male and female, who appear to have a great objection to using the closets and latrines. Washing, I believe, in this furrow has lately been stopped. The bore-hole supplies at Lock-up and Police Camp continue to be good.

(b) Nil.

(c) Nothing has been done to establish a night-soil service, which is very much needed. It is left to the individual householder, who has not always convenient ground for its disposal. In enforcing the deposit of household and other refuse at certain sites only, the Municipality have made no restrictions as to the pollution of residential ground with night-soil, which is the only disposal possible, and I hope some means will be found to force them to adopt a system of night-soil removal. I have had to draw attention to the disgraceful condition of the closets attached to the Public School; this would not exist if a proper sanitary scheme was in existence. It would have been better to have arranged for a site for burning of house and other refuse. At present there are three sites for depositing, and in dry weather, with high winds, obnoxious material is blown all over the place.

(d), (e), (f), and (g) Matters under these headings are still waiting for needed action on the part of the Municipality.

(h) As in former report.

(i) During the flood which occurred here in October, 1905, a still further part of the Bam's Hill cemetery was washed away.

(k) In September, 1904, I drew the attention of the Assistant Resident Magistrate to nuisances being committed, such as washing in the river, deposit of house refuse, etc., and the promiscuous defecation occurring in the immediate vicinity of houses and on the open commonage. This was referred to the Municipality, who have dealt with some of the complaints, but the question of public latrines, though absolutely imperative, is still under consideration. Various offenders in this respect were prosecuted under the Police Offences Act, but with no latrines the pollution referred to takes place further afield.

(l) Nil.

(m) There were two cases of Enteric Fever in 1904 at St. Matthew's, one a European lad, the other a Native. Both recovered, and no special precautions were adopted as they were isolated cases, not occurring at the same time. In April, 1905, three cases of Enteric occurred at St. Matthew's, amongst the Native scholars, one male and two females, one of the latter died some months after from acute Tuberculosis, which developed during convalescence. The Divisional Council was the authority concerned, and the source of infection was most probably the water furrow referred to earlier in this report. In September, 1905, a case of Enteric in Keiskama Hoek occurred in a young European male; it was a bad case, but recovered at the end of November. The authority was the Town Council of Keiskama Hoek. The source of infection was not traced, but probably from water furrow, as the youth was in the habit of drinking freely from it. On August 2nd, 1904, a case of Scarlet Fever was brought to my surgery from a farm near the town, in a European boy,

aged four; he subsequently developed Diphtheria on the 8th, and his elder brother on the 10th, but the latter showed no rash though both desquamated. Antitoxin was used, and both recovered. No source of infection could be traced. The authority was the Town Council of Keiskama Hoek. In September, 1904, I visited Wolf River, to examine some suspected cases of Diphtheria, but found the disease was Influenza complicated with Pneumonia. Measles were fairly prevalent in the District during 1905. Three deaths are recorded amongst Natives, and one in a European.

Small-pox.—On 15th September, 1904, two cases were discovered in the Cala Location, both Native infants, aged 12 and 14 months, and both unvaccinated, in the one the disease was about the end of the second week, in the other at an early stage. The infected site comprised a group of five huts, with no dwellings near, except a school, which was ordered to be closed, so that the quarantining of the area with thirty residents was easily carried out. No source of infection could at first be traced, but on the 20th September, on a farm adjoining I found a Native male infant convalescent from the disease, it was then discovered that during the illness of this case, the mother of the earlier Cala case, had been visiting it, being her grandchild. This child was also unvaccinated, and nothing could be traced as to infection, the child had not been out of the District, but had been in King William's Town about the end of July, and got sick some time in August. On the 24th September, another case in a male infant occurred amongst the Cala suspects, this was the last case, and they were all of a mild nature. Quarantine was raised on 19th October, vaccination was carried out in the Location, and amongst Natives on neighbouring farm. The Municipality of Keiskama Hoek was the authority concerned, and did all that was possible to suppress the outbreak. It would appear that the people in the Location were early suspicious of the character of the disease, as they would not send their children to the school. The first case on the farm suggests the want of better supervision over farm servants. They are under no headman practically, and as in this case easily evade vaccination of their children, for I had only a few months previously vaccinated in that locality. One of the parents was prosecuted I believe.

Vaccination.—For the year 1904 there is nothing to add to remarks in report for the half-year ending June, 1904. The tour then described was carried out in 1903-04. In 1905 the total vaccinations, including 38 Europeans, were 1,793, of which 1,610 were under ten years of age, and 1,307 were primary. Of the latter 905 were children up to two years of age, 371 from that age to ten years, and 21 over ten years of age. This shows the adult class to be well protected, but the other figures, I think, justify my remarks in previous reports as to the accumulated arrears of infant vaccination and the danger arising therefrom. The total in the youngest class would have been even more, but for poor attendances at some of the centres, as it is the number of births registered for the last two years is 832, whilst for 1905 171 deaths of children up to two years of age are recorded, so that I certainly must have vaccinated more children than have been registered. This uncertainty as to infant population makes it impossible to gauge the yearly requirements as to vaccination in the District, and I would suggest that some form of register be kept by the various Headmen for production at the centre affecting their locations. This would in a way supply the want of a vaccination certificate, which the ordinary Native would be incapable of understanding. It would also assist in enforcing Natives to attend at their own centres whenever possible, for as long as these people are allowed to come to what centres they choose, the attendance return of any particular centre is not of much value in the way of accuracy, and furthermore, evasion of the law is rendered quite easy. As regards the majority of the Headman, I do not think much can be said in their favour. They are apparently either incapable of carrying out their duties or wilfully ignore their instructions, for without police assistance I am now convinced the attendances for vaccination would be most meagre. Again in the case of Lepers, it is remarkable how seldom the Headmen report cases, except those in an advanced stage. This certainly shows a great want of knowledge of the persons living in their locations and under their authority.

In 1904 the births registered were:—Europeans, 28; Mixed, 13; Natives, 324; Total, 365. In 1905:—Europeans, 18; Mixed, 13; Natives, 436; Total, 467.

There is a marked discrepancy in these two returns, either the birth-rate has increased in a most marvellous manner, or the registration has been more efficiently carried out. As I have shown in my remarks under vaccination there is still room for improvement in this respect, and here again the Headmen are cer-

tainly responsible. In 1904 the deaths registered were:—Europeans, 5; Mixed, 14; Natives, 287; Total, 306.

Amongst the causes given were:—Influenza, 34; Fever, 85; Convulsions, 50; Dysentery and Diarrhoea, 31; Stomach Complaint, 11; Pneumonia, Bronchitis and Chest Complaints, 46; Consumption, 15.

The deaths up to five years of age were 135.

In 1905 the deaths were:—Europeans, 7; Mixed, 13; Natives, 384; Total, 404.

Amongst the causes recorded were:—Fever, 211; Pneumonia and other Chest Complaints, 56; Consumption, 9; Convulsions, 16; Influenza, 32; Dysentery, 12; Stomach Complaint, 31; Measles, 3; Childbirth, 5.

The number of deaths up to five years of age were 223, and of those up to two years 171. These figures as to infant and childhood mortality are very high in proportion to death-rate and population. The general death-rate for 1905 works out at about 29 per 1,000, and in this, as well as in "Causes of Death," there is a remarkable difference between the two Sub-Districts.

The causes of death are of course too vague to be of any use as regards health statistics, and as I have shown are most dissimilar in my two adjoining Districts.

(iii) SUB-DISTRICT OF MIDDLEDRIFT.

DR. D. C. McARTHUR, ADDITIONAL DISTRICT SURGEON.

(a) to (m) Under these headings there is nothing to add to previous reports. No epidemic or infectious diseases have been present to my knowledge during the past two years in this Sub-district, but I have reason to believe that a slight outbreak of Small-pox must have occurred in the Amatola, for whilst vaccinating there in 1905 two children were brought with quite recent scarring of the face. I could, however, obtain no information from the headman and parents; both children were unvaccinated.

Vaccination.—In 1904 a tour amongst the Native population was carried out after a lapse of three years, but not very successfully. The total vaccinations were 1,434, of which 1,109 were primary. The attendance of the infant class was very bad, the primary vaccinations being chiefly amongst them under 10 and over 2 years, and the apathy and indifference shown by both headman and people was very apparent, some centres having to be visited twice to secure an attendance. In my half-yearly report for 1904, my remarks on the early part of the tour are applicable to the finish of it, as no improvement was shown in attendances. Eighteen centres in all were visited, and it was only possible to report favourably on the work and activity of two headmen. In 1905 twenty-five centres were visited, with an attendance of 2,212, of which 1,760 were primary, and 1,867 under 10 years of age. Seeing that the adult population, appears to be more or less protected, special endeavours were made to secure the attendance of infants and young children, and a record was kept of those up to two years of age, and those from two years to ten years. This showed 857 primary vaccinations in the younger class, which would have been increased, but for a poor attendance at some centres. As it is, the figures are interesting in connection with birth registrations, for the two years total of the latter in this Sub-District is 692, and with the high death-rate of children up to two years of age referred to later on, there is evidently an insufficient registration of infants in this Sub-District, and as I have formerly pointed out, the birth registration is useless as a gauge of infant population and vaccination requirements. The 1905 tour on the whole compared favourably with that of 1904, and there was a marked improvement in the attitude of the Headman, only seven being reported for indifference to instructions. The activity shown by some shows it is quite possible to secure a thorough attendance at the various centres, and the firm attitude of the Acting A.R.M. in prosecuting defaulters had a very good effect. Referring to my report on this Sub-District for the year 1902, I protested against the employment of lay vaccinators without supervision. During the 1905 tour I found the highest percentage of primary vaccinations was in children from two to ten years of age in those locations visited by lay vaccinators.

Lymph.—This was from Grahamstown, and I have reason to believe that the results were uniformly successful.

Leprosy.—One case was sent away in 1904 and four in 1905. One male who had been sent home as an arrested case had to return to the Asylum, as the disease broke out again.

Births, in 1904, 370; in 1905, 322.

I have already referred to these figures in connection with vaccination, and it is evident there must be a number of unregistered infants in this Sub-District. As an aid to both registration and vaccination I should think it would be possible for the Headman to keep a birth register, which could be produced at the vaccination of his location; by some such method all unregistered children could be detected.

Deaths, 1904, 375; 1905, 390.

The causes of deaths, without medical certificates, are necessarily very vaguely described, and of little use for accurate Public Health returns; however amongst causes I find in 1905:—Diarrhœa and Dysentery, 72; Bronchitis, Pneumonia, and Chest Complaints, 160; Consumption, 41; Influenza, 16; Old Age, 19.

The most noticeable and at the same time regrettable feature is the return of 120 deaths amongst children up to two years of age, up to five years of age it is 154, out of the 390 deaths registered for 1905. For the latter year, I find that the death-rate works out at about 16 per 1,000, whether it can be accepted as correct in a purely native district, is, I think, a matter of doubt.

40. KNYSNA.

DR. GEORGE MARR, DISTRICT SURGEON.

The health of the town and District of Knysna during the year 1904-1905 has, with the exception of the epidemic to be referred to later, been very good. There has been no outbreak of Small-pox, nor have we had any cases of Measles, regarding which enquiry is made. Some six cases of Enteric Fever occurred in the District during the two years, and one case in the town, eight cases of Diphtheria in the town, one case of Scarlet Fever in the District, and two in the town, in every instance without any definite source to which infection could be traced; and in no instance, I believe, did the disease spread, the patients being isolated as far as possible. There were also some cases of Whooping Cough in the town and District. From March to August, 1904, in the Doucama part of the District, an epidemic was prevalent, regarding the nature of which there was much dispute between a fellow practitioner and myself. The disease was at first looked at by me as a somewhat irregular form of Enteric Fever, but subsequent observation convinced me that it was Cerebro Spinal Fever. Many of the cases had a more or less marked Pneumonia, especially in the latter stages of the illness, and the other medical man regarded the disease as being primarily Influenza, with a toxic form of Pneumonia grafted on many of the cases. Several *post-mortem* examinations were held, and specimens were forwarded to the Medical Officer of Health, but no final decision as to the nature of the disease was arrived at. In all, there were probably seventy cases, with sixteen or seventeen deaths. The mortality diminished as the epidemic spread, as the later cases appeared to be of a milder character than the earlier ones. So far as I am aware, the disease was confined to coloured people. It appeared to be directly contagious, and in almost every instance contact could be traced. It was about as contagious as Enteric Fever would probably be, under similar social and sanitary conditions. In this connection it may be noted that medical opinion appears to be more convinced as to the contagious nature of Cerebro Spinal Fever than it was two years ago. The incubation period, in two cases which I was able to trace with a considerable degree of certainty, was about ten days. There was no unusual mortality amongst domestic animals, so far as I could ascertain. I have seen only a few of the cases which recovered. Most had no permanent sequelæ, although in a few the hearing was definitely impaired, and in one there was impairment of vision. The epidemic was dealt with by Government, the disease being a non-notifiable one. Two previous outbreaks of an apparently similar character have occurred in this district.

In the beginning of 1904 I made a rural vaccination tour, and vaccinated 257 persons, in addition to six in the town. Ninety persons were vaccinated in the town during 1905. So far as I know, the results were satisfactory, with the exception of some cases vaccinated from calf 3438, February 1905.

There are very few paupers, only some four or five being on the list as a rule.

Under the various headings there is nothing fresh to add to my report for 1903, and the principal items are mentioned in the report which I have furnished as Medical Officer to the Municipality.

41. KOMGHA.

DR. A. CARRINGTON SEALE, DISTRICT SURGEON.

(a) There is a spring at the north end of the town, which has a capacity of about forty-eight thousand gallons per diem. The water is good, but rather brackish. Almost all the water used for drinking and cooking purposes is rain-water, which the inhabitants store in tanks.

(b) No sewerage or drainage system exists.

(c) The bucket system is not in use in the town. Certain spots have been marked by the Town Council and set apart to receive all the refuse and rubbish of the town.

(d) Nil.

(e) There are three butcheries; all are kept in a satisfactory condition. A common slaughter-yard is used at a point about half a mile from the town, and is kept clean, and disinfected regularly.

(f) and (g) Satisfactory.

(h) The order and cleanliness of the locations are satisfactory. The sanitation is such as usually exists amongst Natives. There is a large location or reserve at Mooi Plaats under the control of the Inspector of Native Locations.

(i) There are two cemeteries, one for Europeans in the town, and one for Natives close to the location; both are quite satisfactory.

(k) Nil.

(l) We are absolutely without any Hospital accommodation. Should any serious outbreak of an infectious or contagious disease occur, it would find us utterly unprepared. I think the Town Council should be approached on the matter at an early date.

(m) The District has been remarkably free from any infectious disease. There was one case of Diphtheria, which recovered. Antitoxin was used, and disinfection thoroughly carried out.

We have had several cases of Measles imported, I believe, from East London; the outbreak was mild, and there was no fatal case.

Vaccination was performed throughout the District at eight centres selected by the Magistrate and District Surgeon; 1,954 persons were vaccinated at a cost of £22 7s. Also free vaccination was performed at the Court House every Saturday for one month. It is impossible to give returns of successful vaccination or otherwise, as the Government will not sanction a second visit. All the vaccination was done by the District Surgeon. From information I have been able to obtain from Field-cornets and farmers regarding Natives who were vaccinated, I have no reason whatever to find fault with the Lymph supplied by the Cape Town Laboratory.

42. KURUMAN.

DR. GEORGE BEARE, DISTRICT SURGEON.

(a) The water-supply of the District is chiefly derived from permanent fountains, which run almost parallel to one another in a north-westerly direction, viz., the Kuruman River, Pokhani, Magogaphin, Bailybirth and Grootfontein. The water is good, but slightly hard, owing to a small amount of lime, which all Kuruman waters contain in solution. In the western parts of the District fountains are few and far between, irrigation is seldom possible, and most of the drinking water is obtained from wells.

(b) There is no system of sewerage or drainage in the District.

(c) The disposal of night-soil, etc., in the absence of a Village Board of Management, is regulated by the Resident Magistrate.

(d) There are no overcrowded dwellings in the District.

(e) The management of butcheries, bakeries, etc., is good, and not detrimental to the public health.

(f) The sale, storage, etc., of human food are properly carried out.

(g) Cattle, swine, etc., are kept in open kraals, which, as a rule, are too near to the houses of their owners.

(h) The cleanliness and order of the Native Locations in the District are regulated by the Headmen, who are paid by Government.

(i) There are several Native burial-grounds in the District, which are unfenced, and not well managed. There are two European cemeteries—one at the Mission Station, the other in the Kuruman Township—both of which are kept in good order.

(k) The Magistrate and Cape Mounted Police have done all in their power to prevent anything that might prove detrimental to the health of the District during the years 1904 and 1905.

(m) There have been no epidemics of infectious diseases in the District during the years 1904 and 1905.

43. LADISMITH.

DR. R. W. WATSON, DISTRICT SURGEON.

(a) The water-supply is pure and abundant. The water is brought from the mountain in an open furrow to a small reservoir, situated above and to the north of the village. From this reservoir the water is carried to, and distributed through the town, in pipes. There is no contamination at the source or in transit.

(b) The village is built on a gentle slope running from north to south. In most of the streets there are open stone sluits to conduct the water for irrigation purposes, and as each District is supplied with water on certain days of the week, a kind of drainage and flushing is thus effected; there is no sewerage.

(c) The removal of the night-soil is now undertaken by the Municipality: every householder is compelled to provide a W.C., and the buckets are emptied twice weekly by the Municipal Contractor. The night-soil thus collected is carried to the south of the town and deposited on the veld. It would be an improvement if it were carried further away from the village, or deposited in a trench, and covered over with a layer of earth, as there is occasionally a very disagreeable stench in the village when the wind is from the south.

Slop-water is emptied in the gardens or backyards. No arrangements is made for the removal of household and other refuse, each individual being left to make his own arrangements. The Municipality ought to provide for the removal of refuse, in the same way as they arrange for the removal of the night-soil.

(d) The houses of the Poor Whites and the Coloured people are mostly overcrowded, but during the last two years under report several new houses and streets have been made; many of these houses consist of two and three apartments, with gardens attached; others are building, and in a short time the congestion among the Poor Whites at least, will be relieved.

(e) Same as last year.

(f) Continues satisfactory.

(g) No complaint can be raised regarding the cleanliness of byres, stables, etc., etc., and very few pigs are kept in town.

(h) The Native Location lies to the north-east and some distance from the town. Some of the Natives have built houses and huts, while others make a kind of tent by fixing bags and sacking on poles. No sanitary arrangements exist. Many of the houses and huts are overcrowded; most are filthy, and the ground in front and behind the dwellings is covered with slops, refuse, rubbish, and frequently with solid foeces.

This state of matters calls for attention on the part of the Municipality, as many of the Coloured servants employed in the village, go home to the Native Location every night to sleep.

(i) Same as last year.

(k) Considerable improvement has recently been effected. The Municipality have now an Inspector of Nuisances, who regularly inspects backyards, W.C., etc., and sees that they are kept orderly and sweet.

(l) No Hospital of any kind exists outside the Gaol Hospital.

(m) In the year 1904, thirty-four cases of Enteric Fever were reported in the District. Eight cases occurred in the village, all of which were Whites; they were mostly confined to one quarter. The first case was a doubtful one, but the second case imported the disease from a farm in the District, where she had most of her relatives and friends, and where she had been visiting. These eight cases were spread over the whole year, the first occurring at end of January and the last one about the beginning of December. It may be well to remark here that the Municipality had not then undertaken the removal of the night-soil.

Of the remaining twenty-six cases, nineteen occurred in the first half of the year, and with the exception of two which occurred at Elands Vlei, immediately outside the village, and one at Ockert's Kraal—the other sixteen cases were in houses situated along the course of the Dwars River, the water of which is used for drinking, washing and irrigation purposes. All the nineteen cases were Whites. Of the remaining seven cases which occurred in the second half of the year, five were Whites and two Coloured; and excepting one case, which was at Adams Kraal, a little beyond Ockert's Kraal, the other six cases were at Voorbad, a valley separated by a small hill from Dwars River.

During 1904, five deaths were attributed to Enteric Fever.

A very severe epidemic of Diphtheria spread over the whole District during 1904. Seventy-eight cases were reported. Of these only four were Coloured, so that no doubt there were many cases among Poor Whites and Coloured people which were not reported. Only seven deaths were certified.

Diphtheria during 1904.—A report on the outbreak of Diphtheria in 1904, and its continuance into 1905, was made to the Medical Officer of Health for the Colony.

One case of Scarlet Fever was reported in 1904.

In the year 1905, thirty-four cases of Enteric Fever were again reported, seven to the Municipality and twenty-seven to the Divisional Council.

Of the seven cases reported to the Municipality six were Coloured people living in the Native Location; the one White case was no doubt infected by a Coloured servant coming from an infected house in the location.

Of the remaining twenty-seven cases twenty-four were reported in the first half of the year; twenty of these cases were reported from middle of January to the middle of February, and were confined to Voorbad, where six cases had occurred during the latter months of 1904. A report on the cause and spread of this epidemic was made to the Medical Officer of Health for the Colony.

During 1905, eighteen cases of Diphtheria were reported in the village, and seventeen cases in the outlying Districts. These cases were dealt with in the report on the 1904 outbreak.

One case of Leprosy was reported in the village. There was no Measles in the District.

During the two years under review there were very few vaccinations and re-vaccinations. No tour was undertaken in 1905, and it is advisable that a comprehensive tour of the whole District should be undertaken in 1906.

I regret to report that Syphilis, through the stoppage of free treatment of Coloured people, is increasing in the District. In the course of my practice I have come across some White families where the mothers and children have been infected by Coloured servants, and I have also frequently seen Coloured people, suffering from active Syphilis, in domestic service.

Coloured people can not, and will not pay for continuous treatment, and so the disease is allowed to develop unchecked, and in a few years Coloured servants will be a decided danger in the home.

44. LAINGSBURG.

DR. H. W. STEPHENS, DISTRICT SURGEON.

General Health.—I think that the general health of this area and neighbourhood has been very good during the past year; the only two diseases which appear to be on the increase and to require stricter measures taken against them are Phthisis and Syphilis. There was a slight outbreak of Small-pox in September, 1905, but the prompt and effective measures taken by the Municipality were rewarded by the disease not spreading beyond the two original cases, except to the baby of one of the women, and it had been vaccinated, and the vesicles were fully developed before the varioloid rash appeared. They all three recovered.

(a) The water-supply question has not received the amount of attention from the Municipal authorities which in my opinion this most important of all sanitary measures deserves, the supply being still drawn from shallow wells, open sluits, and in a small minority from rain water.

(b) There is no system of sewerage and drainage in use here, nor would one be effective without a greater outlay than would be possible at present.

(c) The pail system is the one still used, but the great mistake of not having extra pails to be cleaned and brought clean to the closets to be exchanged for full

ones is still committed. The wagon, with its load of two wooden casks without even covering lids, and which are absolutely incapable of cleansing, being taken from house to house for the buckets to be emptied into them. There is no such thing as thorough cleaning and tarring of the buckets before they are replaced. There is no arrangement for the removal of slop-water, and this is one of the most important wants at the present time, as the open spaces are being built over, the population is increasing, and there is no way of getting rid of the slop-water from the houses which have no garden or only a small one, without causing a nuisance either to the inmates or their neighbours.

Household refuse is removed twice a week by contract.

The cesspool referred to in my half-yearly report is about to be removed.

(d) Nearly all the small houses in the neighbourhood of the Mission, and occupied by Coloured people, are overcrowded and badly ventilated, and it is these houses with their earth floors that do more to spread Tuberculosis among the Coloured inmates than anything. The usual places for these people to expectorate when sick appear to be the wall or the floor, and remonstrance is generally in vain.

(e) The slaughter-houses and bakeries are fairly well managed, and cause no nuisance.

(f) I think that there is no ground for complaint against any of those who sell articles destined for human consumption, except in the case of certain Indians, and these certainly ought to be carefully watched by the Sanitary Inspector, as they are not so careful in the disposal and storage of fruit and fish as should be the case with articles of this description, which decompose readily, and are apt to carry infection, as in the former case they are eaten raw, and often without even washing.

(g) There is an improvement in this respect as regards the village itself, but the Coloured houses at the upper end have pigstyes just outside the doors and against the walls of the houses in some cases, and the general condition of these animals is very dirty.

(h) There is a great improvement in the order and cleanliness of the Native Location, and there are not so many loiterers to be seen hanging about the location, who should be at work as formerly. But the Municipality has still much to do in providing these people with respectable houses, on the lines of the barracks in use at Maitland, and giving them a well and arranging for a public wash-house, to be under their supervision, in which the Coloured people can carry on washing, instead of in muddy pools in the river bed.

(i) There is no improvement in this respect. The cemeteries show a great want of care.

(k) The streets are cleaner and better looked after; the water sluits are in better condition; the removal of night-soil is carried out more regularly, and so is the house refuse removal, but there is room for much improvement in all sanitary matters.

(l) There is no hospital accommodation of any sort in the District; and this is a great want, especially for Coloured people, for small operations and the treatment of many cases which at present die for the want of care and nursing.

While Syphilis is increasing and spreading so much, each District should be provided with a lock hospital, in which such cases can be confined and treated until they are no longer a danger to the community. For sick paupers also there should be some accommodation available, if only a room, kept for the purpose, in which they can be housed while sick.

(m) During the half-year ended 31st December, 1904, the following cases of infectious disease were reported.—

Enteric Fever:—One European female child, recovered.

Diphtheria:—Two European male children, recovered; one European female child, recovered; one European male adult, recovered.

The births registered for the Municipal area were:—European: Male, 6; female, 7. Coloured: Male, 6; female, 12. Total: Male, 12; female, 19. Total births, 31.

The deaths for the same period were:—European: Male, 5; female, 2. Coloured: Male, 5; female, 4. Total: Male, 10; female, 6. Total deaths, 16, of which six were due to Phthisis.

With regard to the year 1905, there was a small outbreak of Small-pox in September, two women being found with the disease, and the baby of one contracting it afterwards. The infection must have been brought by tramps, of whom a good number were daily passing to and fro at that time, and Small-pox was present in Kimberley and Johannesburg. The cases were isolated in a camp on the north-west of the Buffels River, with their families, and their houses disinfected with formalin solution, and well ventilated. One guard was found sufficient, and rations

of food, wood, and water were conveyed each day to a place near the camp, whence they were fetched by the inmates. Vaccination was carried out in the village, 507 persons being vaccinated. The majority of the insertions seen was successful, but most were school children, who broke up for the Michaelmas holidays shortly afterwards, and Coloured people, many of whom worked on farms outside the village. The last case of Small-pox was discharged on October 21st, the huts and clothing burnt, the inmates bathed in disinfectant and given clean clothes, and allowed to return home. The total cost of the outbreak was £24.

Of other zymotic diseases there were:—

Enteric Fever: One case of a young Coloured female, brought in sick from the Mordenaar's Karroo, and who died in the village.

Diphtheria: One European female adult. The absence of other cases may perhaps be due to the dryness of the season; in cold, wet seasons it is almost always more present than in warm dry ones.

Measles and Scarlatina: None.

Varicella: A few mild cases.

Mumps: Of these there was quite an epidemic in the early part of the year, hardly a house escaping infection.

Pertussis: None.

Tuberculosis accounted for eight of the thirty-four deaths.

During the year the births registered were from the Municipal area as follows:—European: Males, 12; females, 11. Coloured: Males, 14; females, 17. Total, 54.

And the deaths:—European: Males, 2; females, 3. Coloured: Males, 17; females, 12. Total, 34.

Of the deaths, eleven, or one-third of the total, took place in infants under a year, from causes such as vomiting and diarrhoea. Of the remainder, the most important are eight deaths from Tuberculosis, six being pulmonary, one tubercle of abdominal glands, and one meningitis. Of the six pulmonary cases, two were visitors who came to the village in an almost dying state. One belonged to the poor white class, and had suffered for some years; and three were Coloured females, two of whom had contracted the disease whilst in service in Cape Town.

There was one death from Cancer (carcinoma cervicis uteri) in the village, whilst there were two more in the District; one similar to the above, and another a visitor, who died from primary epithelioma of the lung.

There was one death from Enteric Fever, and one directly and one indirectly from Syphilis.

In regard to the last-named disease, I would suggest that the measures now in force are inadequate to cope with its spread, and that, as a rule, in Natives its manifestations are much milder in the primary and secondary forms, and in these forms the disease tends to become quiescent, even without treatment, and is therefore much more insidious and widespread than it is easy to form a correct estimate of, and considering the danger to which the large majority of young children are exposed, owing to their being handled and even kissed by their Coloured nurses, I think it is the duty of those medical men and others who have the safeguarding of the public health to urge upon the Governments of the various South African Colonies the necessity of taking stronger measures for its suppression before it gets too great a hold on the Coloured people and Natives, to say nothing of the farming population, among whom I have reason to believe it is spreading.

From a hygienic point of view, I think the importance of the State control of this disease is only equalled by that of Tuberculosis.

45. MAFEKING.

DR. T. W. P. HAYES, DISTRICT SURGEON.

(a) The water-supply is totally insufficient in quantity to supply the needs of the town. The supply is still brought from the springs to the reservoir in an open furrow, which gives free access to dogs, goats, and other small animals. In several places adjoining this furrow Natives have established huts, and there is a well beaten track from the huts to the furrow, where the Natives obtain their water-supply. It is disgraceful that this nuisance has not been stopped before, as the Natives are liable to disseminate all manner of disease to the town. In fact, the recent outbreak of Enteric Fever points very strongly to the water-supply as the source. A bacterioscopic examination of the water shows the presence of an exces-

sive number of organisms, and the presence of coloured colonies and the reduction of the neutral red Bouillon points to contamination from human or animal sources. The Council recognise the seriousness of the situation and are now engaged in constructing a Municipal scheme for the better supply of the town with pure water. Meanwhile the water ought to be protected from contamination by conducting it from the springs in pipes, and the reservoirs enclosed by a properly constructed fence, so as to preclude the possibility of animals or human beings polluting the supply.

(b) and (c) The pail system, which is in use here, is well carried out. The night-soil and refuse are taken to a distance of about one mile outside the town and deposited on a site where it cannot possibly contaminate the water-supply.

(d) Overcrowded dwellings are now non-existent, as the Municipal Authorities have taken vigorous steps in the matter, and owing to the stringent regulations passed for the erection of new buildings.

(e) These are all in good sanitary condition and visited periodically by the Inspector.

(f) It is to be regretted that in the absence of more stringent regulations the Council are unable to cope so successfully with the sale of meat and supervision of butchers shops, etc. It is desirable that the Council be given more scope in dealing with any irregularities which might occur under this section.

(g) Keeping of Cattle, etc.—This has been carried out in a most satisfactory manner.

(h) The location across the river has been greatly improved and divided into two sections, one for the Coloured population, which is an established one, and the other for the floating population of Mixed Native Races. The houses have been numbered and an attempt made to keep them more symmetrical. Streets have been laid out, and the location is much cleaner than formerly, owing to the careful supervision of the Sanitary Inspector. Still, there is room for great improvement in sanitary matters in this part of the township.

(i) The cemetery is kept in good condition.

(k) All nuisances are, as far as practicable, dealt with by the Authorities, and the water-supply is at present engrossing their attention.

(l) The Hospital accommodation is ample for the needs of the town.

(m) The health of the town has been good, and, until the recent outbreak of Enteric Fever, there were very few cases of sickness. There was an epidemic of Measles last Summer and Acute Granular Ophthalmia was also prevalent, especially among the lower classes. Vaccination has been exhaustively carried out in view of the prevalence of Small-pox in the Colony. The Council have adopted the plan of forming themselves into Sub-Committees which periodically make a tour of inspection from house to house.

I may add that the Council have adopted the Model Health Regulations, framed by the Government, and are now awaiting their promulgation.

46. MALMESBURY.

(i) MALMESBURY.

DR. A. J. T. ROUX, ADDITIONAL DISTRICT SURGEON.

General Statement.—Attention is drawn to the appendix, which, at a glance, gives the general condition of health during the years 1904 and 1905, and a perusal of the insanitary condition prevailing in all our villages, as contained in this report, will disclose the cause of some of the epidemic diseases.

(a) The sources of water-supply are open reservoirs or dams, surface and artesian wells. Open reservoirs are not protected by enclosures; surface wells are dangerous, and are likely to be contaminated by surface drainage, as in many cases they are not even covered over, and buckets, not always clean, are used to haul the water to the surface.

Water from springs is used in the two villages, Riebeek West and Riebeek Kasteel; in the former it is led on for general use with pipes; in the latter village a pure supply is not thus assured, and Typhoid Fever has been exceptionally prevalent in that neighbourhood.

(b) Drains covered in do not exist in this District, as the storm-water is too largely charged with sand, which blocks them. In this town and in the neighbour-

ing villages few furrows are properly made. They are not large enough, allowing storm-water charged with collected dirt to overflow, and are not water-tight, or are not even protected by stone, are usually grass grown, and besides offending the æsthetic eye, act as accumulators of that which offends any sanitarian. In this town the river during the dry months, when stagnant, becomes a danger, and being so prominently situated, must have attention greater than is at present bestowed upon it.

(c) The single tub night-soil system still prevails in this town, and greater care should be exercised in disinfecting the buckets, and the overflow of buckets on to the streets during transit should be prevented.

In the villages the same system prevails, but the same care is not exercised in burying all stercus in furrows.

Slop-water is in many instances discharged in the public furrows or runs into the soil on private property.

Household and other rubbish are carefully removed in this town, but should be frequently burned.

I have repeatedly reported in regard to the following matter:—The primitive furrows at the four villages of Darling, Moorreesburg, Riebeek West, and Riebeek Kasteel. The two former have lately greatly developed in size, but not the idea which is incumbent upon them with regard to an adequate sanitary system, the collection and speedy removal of manure, rubbish, etc., from private property, and a properly constructed drain to carry off all the surplus water during the rainy season.

They are dependent on surface wells, and the filth now left on the surface for months is, as a matter of course, sure to find its way into their water-supply before it has lost its harmful qualities.

I feel so strongly on this point that I am inclined to use harsh terms in criticising the lack of sanitary precaution in the Local Authorities concerned.

(d) Overcrowding in the village of Moorreesburg must be checked, and only those tenements used as houses which, in the opinion of the Local Authority, are fit for human habitation after inspection, and no new tenement should be put up without leave asked and given, with re-inspection if such has been done.

(e) and (f) Slaughter-houses have been placed beyond bounds in this town. Bakeries and butcheries are kept clean.

The receipt of fish in a decomposing state from the sea coast by train should be stopped. The van in which the fish is put becomes odoriferous in the extreme, as also the station platform during its removal. The fish should not be received in an unsound condition, and the Railway Authorities should not deliver it, unless under medical certificate. Who buys this odoriferous fish I cannot tell, but though to my knowledge no case of ptomaine poisoning has come to notice, after the special occasions when it was brought to my cognizance, several cases of poisoning after eating fish have occurred.

(g) Stables for cattle and horses are in too close proximity to the water-supply of most households.

The Native (Hottentot) Locations at Klipheuvel is still in the same primitive condition—no water-supply, no sanitation, though its inmates are fewer.

The cemetery at Riebeek Kasteel, situated on a knoll, surrounded by houses and wells at a lower level, still proudly rears its head. Having a new school next to it, it fancies it has thereby received a new lease of life, and can defy the Health Department of the Cape Colony.

(m) Infectious Disease. Typhoid Fever: I shall lightly touch upon this, as the appendix of health gives a correct idea that this epidemic was not very extensive. Riebeek Kasteel, with its centrally-placed cemetery and surface wells, may be particularly instanced as a centre of infection. Its guardians of health, the local Board, seem to think differently.

Syphilis, associated just now with Moorreesburg, has spread to Malmesbury, but is well under control.

Tuberculosis: In considering this disease, represented for the years 1904 and 1905 by the fractions of $115/602$ and $112/534$ respectively of the total number of deaths, of which $11/602$ and $16/534$ are European and $104/602$ and $96/534$ are of mixed descent, I wish to put on record that my suggestion of last year was not acted upon, viz., to supply to the very poor *gratis medicine*, whereby they are localised and are under supervision.

That, I think, ought to be the natural outcome of its notification as an infectious disease, and not, as now, for statistical purposes only.

In the country Districts there are no free dispensaries, and the habit of using decoctions of herbs is to be deprecated, for though some herbs allay the cough, they possess no antiseptic properties, and their preparation requires care and entails trouble which the class affected are inclined to avoid.

I have further compared the number of deaths from Pneumonia during 1904 and 1905, which are 102 and 63 respectively. If we add Pneumonia to Tubercular cause of death, we get the fraction 217/602 for 1904, and 175/534 for 1905 of all deaths, a high percentage for chest diseases in our healthy climate; and as I strongly suspect that many cases notified as Pneumonia are really a process of Tubercular action, the case becomes more serious. The percentage of European attacked is small, but as Tuberculosis is an infectious and contagious disease, they will in course of time suffer more than in the past, unless precautions are taken to prevent the spread of contagion, such as has been lately advanced in Scotland, for no child suffering from Tubercular Chest Disease should attend school, nor should a workman work with other workmen who are so affected.

Small-pox: The epidemic during 1904 was within a limited range, and easily suppressed. The cause of an outbreak is usually obscure, probably some pre-vaccinated case with a few papules and vesicles escapes notice.

Leprosy is still amongst us, and will remain so unless all those who neglect to notify be punished, whether the physician is a crank who fancies he has a cure which takes years to prove, as well as those who fear that it may injure their practices. For these I have no sympathy, for they might send them to the District Surgeons, who, I feel confident, will not shirk their duty for fear of being dismissed. The removal of patients when once certified should be expedited.

Causes of Death 1904 and 1905. Malmesbury District.

			Urban.				Rural.				Total.	
			European.		Coloured.		European		Coloured.			
			1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.
Population ...			4,393		3,257		9,165		12,813		29,628	
Diphtheria	...	...	...	...	...	...	1	6	2	7	3	13
Measles	...	...	...	...	...	...	...	...	1	...	1	...
Typhoid Fever	...	...	1	1	4	2	5	2	16	11	26	16
Puerperal Fever	...	...	...	...	...	...	1	...	1	...	2	...
Whooping Cough	...	...	2	...	3	1	...	1	16	8	21	10
Influenza	...	...	...	...	...	...	2	1	2	4	4	5
Croup	...	...	1	...	...	...	3	...	3	...	7	...
Pleurisy	...	...	...	...	2	1	...	...	...	...	2	1
Bronchitis	...	...	...	1	2	3	1	1	12	6	15	11
Pneumonia	...	...	4	4	18	19	11	9	69	31	102	63
Tuberculosis	...	...	3	12	31	30	8	4	73	66	115	112
Convulsions	...	...	4	3	5	1	6	5	51	46	66	55
Diarrhœa and Vomiting	...	...	3	4	13	14	13	7	13	20	42	45
Marasmus	...	...	3	5	8	9	3	...	8	6	23	20
Old Age and Debility	...	...	1	3	1	5	1	2	17	8	20	18
Cancer	...	...	1	3	1	..	9	6	3	2	14	11
Heart Disease	...	...	1	3	3	3	8	8	7	12	19	27
Apoplexy	...	...	1	...	1	...	11	...	3	...	16	...
Dropsy	...	...	...	...	...	...	1	...	5	...	6	...
Premature Birth	...	...	...	2	...	7	...	1	...	5	...	15
Kidney Disease	...	...	...	2	3	1	...	1	1	3	4	7
Liver Disease	...	...	...	...	...	...	1	...	1	...	2	...
Meningitis	...	...	4	...	4	...	3	...	4	...	15	...
Peritonitis	...	...	1	...	...	...	1	...	5	...	7	...
Accidental	...	...	2	4	3	4	3	7	20	12	28	26
Other Diseases	...	...	4	10	9	8	7	21	23	40	42	79
			36	57	111	108	99	82	356	287	602	534

(ii) SUB-DISTRICT OF HOPEFIELD.

DR. CHAS. B. ROSSITER, ADDITIONAL DISTRICT SURGEON.

In accordance with Circular Letter 67, 1905, I have the honour to submit the following report on the general health, etc., of this Sub-District, which comprises the four Field-cornetries Zout River, St. Helena Bay, Saldanha Bay and Shruvershoek, together with the village of Hopefield and Vredenburg.

Although this area is a separate Magisterial District for most practical purposes, the birth and death returns and those of infectious diseases are not recorded at the Hopefield offices (excepting those of the Zout River, F.C., and village of Hopefield), these being sent by the respective Field-cornets direct to Malmesbury. As these particulars are essential for a report of this nature, I regret that I am unable to form any opinion of the causes which influence the death-rate and health of the area, as about seven other medical men practice in the District, excluding myself.

Having as District Surgeon no control over or connection with the sanitation of my District, except when my services are specially requisitioned by the Government, the following remarks must be taken as more or less from a Private Practitioner.

(a) The water-supply remains as in previous years, each householder usually providing his own tank or well.

(b) Sewerage and drainage are non-existent.

(c) Night-soil is collected by bucket at Hopefield village, and conveyed to a suitable site, some distance from the village, but as many householders, especially the poorer Coloured people, are not provided with privies by their landlords, the system is for this and other reasons still far from perfect, and means should be taken to compel all householders to use privies.

*The Hopefield Public School, which by the way is very badly ventilated, has no latrines for either sex, pupils or teachers. It is true that four closets exist, but one has neither seat nor bucket, and is horribly filthy; another is used as a fowl-house; number three is rented and locked by the Standard Bank; and the other utilised by a private house close by. This is a matter requiring immediate attention.

(d) A good deal of overcrowding exists among the Coloured people, and several dwellings are unfit for habitation.

(e) and (f) The management of bakeries, butcheries, etc., still leaves a good deal to be desired.

(g) Cattle, swine and other animals are kept far too near dwelling-houses, and many stables, etc., are sadly lacking in ventilation and drainage.

(h) No Native Locations exist here.

(i) The cemeteries have been specially reported upon by me and my predecessor.

(k) Sufficient energy is not exercised by the Village Management Board in abating nuisances, and as it consists of three members only, it would be well to consider the advisability of increasing the number to five, to strengthen its power.

(l) There is no Hospital accommodation nearer than Cape Town for either infectious or non-infectious disease, and the want of such is keenly felt.

(m) I can give no information under this heading for reasons already given, but I am not aware personally of any epidemic having occurred during 1905, at the early part of which I was appointed.

No vaccination was performed during 1905, but a house-to-house vaccination was done in the Hopefield village only at the end of 1904, a very inadequate procedure. A tour has, however, been authorised for 1906.

A matter which I consider to be worthy of brief notice here is the working of the Inquest Act and Registration of Births and Deaths Act here and probably other Districts.

* This has been brought to the notice of the Education Department,

1. The present system, I think, constitutes a danger to the community (*a*) because it facilitates the commission of crime and hinders its exposure; (*b*) because persons may be allowed to die, owing to lack of proper medical attendance, due to indifference on part of relatives, etc., who know that a medical certificate is not compulsory, and fail to obtain a medical man; (*c*) infectious disease may also, for the latter reason, occur undetected with obvious disastrous results.

2. It causes a waste of public money, because inquests are often performed unnecessarily, or when done, are more or less a farce, while infectious disease may for previous reasons occur and cause considerable expense to local authorities.

3. Vital statistics based partly upon diseases diagnosed by illiterate laymen (often after death of patient) cannot be sound, and prevalent causes of death may have their origin obscured.

As an example, I will instance what occurs. A person is taken ill in one of the neighbouring Field-cornets, and shortly dies without medical aid. Any time within three months the death may be reported to the Field-cornet, who registers what he considers to be the cause of death from the hearsay evidence before him. Should his suspicions not be aroused (and I would here direct attention, for example, to the similarity between many diarrhoeal diseases and symptoms of irritant poisoning), a crime may have been committed, but remains undetected; but if he, however, thinks it necessary to hold an inquest and *post-mortem* examination, the medical evidence two or three months after death is often of little value, and valuable witnesses may be unobtainable. Moreover, the Field-cornet is often quite incapable of conducting an inquiry, owing to general illiteracy and lack of the expert knowledge required to extract useful evidence from witnesses, while the medical man need not volunteer evidence, and has no power to assist the Field-cornet. Also as the Field-cornet is empowered to call upon any practitioner to furnish medical evidence or perform *post mortems*, and is, in fact, instructed to obtain the least expensive, loosely worded certificates often take the place of *post mortems*, or the latter may be done in an unsatisfactory manner, and valuable evidence thus lost. As the medical man is not a Government official, he cannot be held responsible, except with great difficulty in rare cases, and considerations of private practice may exert some influence upon him.

Again, as every case of sudden death, whether due to accident, injury, or disease, which presents no external evidence of cause of death, can only very rarely be correctly diagnosed by laymen, the practice of burying these bodies after hearing only lay evidence is open to grave criticism. The public, especially in the case of Natives, are often very indifferent about securing medical aid, and hence when death occurs under doubtful although possibly natural conditions, the Government is put to the expense of holding inquests, which, had compulsory certification been in force, would not have been necessary.

Space forbids my dwelling more upon this matter, but I would suggest that the present Acts be amended on the following lines:—

1. Compulsory medical certification in all cases where reasonably possible.
2. Notification of death to be given *immediately* to Field-cornets, who will either grant burial order or not, as may be required. In his absence the Justice of the Peace might act.
3. In cases of serious illness of a pauper, the Field-cornet to send District Surgeon to ascertain cause before death if possible.
4. Only persons of good status and sound education to be appointed as Field-cornets, and preference to be given to gentlemen of legal experience or training.
5. All Government medico-legal work to be performed by its own officials *only* whenever possible, and a special officer appointed as Coroner for each District, having medical training, as one with this qualification is the only person who can sift or often even extract technical medical evidence from laymen, or weigh evidence of medical witnesses correctly, and most inquests depend upon the medical evidence for verdicts.

A District Surgeon holding the "commission of the peace" already possesses the latent power. He might be assisted by the Field-cornet, and would investigate all uncertified cases, unless death was due to very obvious natural causes, *e.g.*, Protracted Tuberculosis.

6. All birth and death returns and notification of infectious diseases to be recorded at Hopefield for the Sub-District.

47. MIDDELBURG.

DR. H. HOLZMANN, DISTRICT SURGEON.

(a) With regard to the water-supply there exists still the same complaint as in former years concerning source and purity of the water used for household purposes. There are still two main sources where the water for the town is obtained from, viz., the market well and the open furrows in the streets which get their water from springs in the river above the town. The fact that the water from both sources is far from good and pure has been stated at length in my previous health reports. As the town became a large Garrison centre about four years ago, and as the population has increased from 1,555 inhabitants in 1891 to 6,139 inhabitants in 1905, the Local Authorities, repeatedly advised by sanitary officers and water experts of the Military, are well aware of the danger to public health caused by a bad water-supply and of the necessity of remedying the existing bad state. Consequently public meetings have repeatedly been held during the last years for the purpose of considering the advisability of undertaking, carrying out and effecting a scheme for the supply of good water to the inhabitants of Middelburg. At a meeting of resident householders held on the 27th of May, 1903, a committee of householders was appointed with the object of finding by means of boring a sufficient quantity of water near enough to be conveyed to the town in pipes. With the assistance of the Colonial Government boring operations were started in January, 1904, and a spring was discovered containing very good water in the quantity of about 200,000 gallons a day. Nevertheless very many members of the said committee objected very strongly to the use of the water from that bore-hole, although the Government Engineer pointed out that in his opinion the water from that bore-hole would never fail and never affect the springs in the river bed which are situated at a distance of 200 to 300 yards from the bore-hole, and which supply the furrows running through the street. Consequently another public meeting of ratepayers was held at which it was resolved to bore again on a spot so far off from the river bed, that an affection of the above-mentioned springs could not be made a matter of objection by anybody. Another couple of hundred pounds were accordingly spent to abate scepticism and to make the water scheme acceptable even to those opponents by boring for water in a place quite remote from the river. The Government Engineer again discovered a spring producing 200,000 gallons a day by pumping with an oil engine. But although the Government Engineer had given the fullest assurance that in his opinion the spring would easily produce twice as much water as Middelburg requires, would never fail even when continually pumped, although the Government Analyst had certified that the water was pure and good in every respect, although a public meeting of ratepayers, held on the 29th July in 1904, had fully agreed beforehand to all these steps undertaken by the special committee, and although the Government was ready to advance a loan of £10,000 for effecting the scheme, *i.e.*, the building of a reservoir and the laying of pipes through the streets of the town, another public meeting of householders, which was convened to finally decide on this very important matter, withdrew its former consent and refused to grant the permission of using the loan of the Government for bringing down the water from bore-hole No. 2. Consequently more than £500 have been spent for boring operations, without pushing forward in the slightest degree the badly-needed water scheme and without benefiting the town in any way.

The resolutions passed at the meeting held on the 29th July, 1904, a full report of which will be found in my previous health report, are repeated below in short, as also a short report of the proceedings of the last meeting held on the 21st October, 1905, when the whole scheme with regard to a water-supply in pipes was rejected.

The meeting of the 29th July, 1904, passed the following resolutions:—

“I.” That a water scheme be adopted. Carried by about 400 votes to 2.

“II.” Proposed by Mr. S. Pretorius, seconded by Mr. J. N. A. Theunissen, and carried with only one dissentient:—

That the scheme of the Government Engineer for obtaining water from bore-hole No. 2 leading it into the town, including over sixteen miles of piping, be adopted, that tenders be invited for the carrying out of the scheme, that the Council be empowered to spend £10,000 on the execution of the scheme, that the Council be

also empowered to borrow the said sum under the Act of 1879 on the security of a yearly rate, to be called a water rate, of 1d. in the £ to be levied on occupiers of rateable property, and that the minor regulations in connection with this scheme be submitted to a public meeting at a future date.

Proceedings of the public meeting held on the 21st October, 1905, in the Town Hall. The Chairman, Mr. N. F. de Waal, M.L.A., supported by Mr. Pretorius, M.L.A., and several other gentlemen, proposed that a water scheme, as proposed and accepted at the meeting of the 29th July, 1904, be adopted. Mr. D. J. du Plessis, supported by Mr. B. Coetzee, Jun., moved an amendment that the water scheme proposed by Mr. de Waal with regard to bore-hole No. 2 be rejected, and the whole matter be postponed until such time as a better scheme could be laid before the public, and until such time as the finances of the country would be in a better state. The amendment was carried by 211 votes to 165, and the resolution passed to levy a special rate from all resident householders to pay the cost of over £500 already occurred in connection with the water scheme by boring operations, etc.

This postponement of the whole water scheme—probably *ad infinitum*—apparently pleased very much many members of that meeting.

(b) There is no sewerage or drainage scheme in Middelburg.

(c) Re night-soil I have stated in my previous report that the bucket-system adopted several years ago answers very well. The Municipality removes the buckets once weekly, which is sufficient for the winter months, but during the summer months the smell from the W.C.'s is sometimes unbearable. Either a more frequent removal should then take place or the use of a disinfectant, such as quicklime, which is supplied free of charge by the Municipality, should be made compulsory, in order to prevent a menace to the public health. Slop-water, household and other refuse are also removed by the Municipal carts in a satisfactory way.

(d) Overcrowding of dwellings has not come to my notice. The Sanitary Inspector controls regularly the houses in town in this respect.

(e) Slaughter-houses, butcheries, bakeries, etc., are fairly well conducted. No complaints have been brought to my notice by the Sanitary Inspector.

(f) and (g) There is nothing fresh to be reported under these heads.

(h) Since a special Sanitary Inspector has been appointed for the Native Location, the order, cleanliness, and general sanitation of the Location have very much improved. The huts and streets have quite a different appearance concerning cleanliness from the state prevailing some years ago. Special latrines have been built, and the regulations well adhered to.

(i) There is nothing new to be reported under this head.

(k) As one of the greatest nuisances in Middelburg which strikes every one entering the town I may mention the terrible dust caused by the slightest breeze and the traffic. In former years Middelburg had the reputation of being one of the best health resorts in South Africa for people with chest complaints, but owing to the unbearable dust the town has entirely lost this reputation. Considering that a very inferior quality of stone, crumbling into dust after a very short time, is used for macadamising the roads, and considering that there are no water carts in use for watering the streets, one can easily imagine what appearance the streets have, when the natural rain-fall—the only means to settle the dust—is as scanty as it has been during the last two years.

The rainfall registered at the Gaol has been in 1904, 11.00 inches, in 1905 12.82 inches.

It is, in my opinion, to a great extent due to this unmanageable nuisance (the dust) that in spite of all other sanitary improvements the mortality caused by inflammation of the lungs is such a high one, rather increasing during the last years instead of decreasing.

In 1903, 1904 and 1905 the number of deaths registered from Pneumonia was 83, 76 and 110 respectively. As the total number of deaths registered in 1905 was 450, it will be seen that inflammation of the lungs was responsible for nearly 25 per cent. of the deaths, undoubtedly a very high and quite abnormal proportion.

(l) Except a small Hospital situated about three miles from town belonging to the Municipality and specially built for isolating Small-pox cases, there is no Hospital accommodation in Middelburg, not even in the Gaol. Considering the rapid increase of the inhabitants during the last three years, mainly through the influx

of poor whites and natives, and considering the great number of infectious and also contagious diseases (Syphilis), which without proper isolation are a great danger to public health, and the presence of a large garrison, a small Cottage Hospital for Diseases is very badly needed. Please refer to my previous reports.

(m) The following cases of infectious disease were reported at the Municipal Office in 1904 and 1905:—1904: Enteric, 75; Diphtheria, 49; Scarlatina, 13. 1905: Enteric, 11; Diphtheria, 4; Scarlatina, 2.

The number of deaths registered from the above diseases during 1904 and 1905 was as follows:—1904: Enteric, 27; Diphtheria, 28; Scarlatina, 2. 1905: Enteric, 8; Diphtheria, 5.

On comparing the number of notifications with the number of deaths registered from the above diseases, it is at once evident that all cases of infectious disease are not being notified. This, however, may be accounted for by the fact that the deaths include those at the Military Camp, while the Garrison does not notify cases of these diseases at the Municipal Office in town.

The probable cause of the outbreak of Enteric Fever could be traced in several cases to bad water. The disease lasted during almost the whole of 1904 as well as during the months of January, February and March, 1905. The steps taken to suppress Enteric Fever have been the usual ones, the use of disinfectants and the use of boiled water for drinking purposes, and of boiled milk, as there is no pure water, *i.e.*, free from germs, obtainable in town owing to the above mentioned water scheme unfortunately having been rejected. The precautions taken with regard to Diphtheria were immediate inoculation of all the patients and contacts. Proper isolation of the patients could unfortunately not be carried out as there is no Hospital in Middelburg or District, except the small Hospital belonging to the Municipality, which is only for the purpose of isolating Small-pox cases. During a period of about four months, from the 26th June to the 31st October, 1905, there was a rather bad epidemic of Measles in Middelburg, most probably conveyed from Steynsburg, raging more amongst Europeans than amongst Natives, and affecting children and adults alike. For the latter reason the percentage of mortality was rather a high one, fifteen deaths being registered as caused by Measles. In many cases, however, where Pneumonia or Broncho-Pneumonia or Bronchitis have been stated as the cause of death (total number in 1905, 117) the primary disease was most probably Measles. As the notification of Measles is not compulsory, I can only give an approximate number of patients having suffered from Measles as 150 to 200, amongst whom Europeans and Coloured, children and adults, have been affected almost alike. In 1904 and 1905 Middelburg was entirely free from Small-pox, as vigorous steps were taken in 1902 and 1903 with regard to vaccination, isolation and disinfection, in order to stamp out the disease. On account of vaccination being thoroughly carried out during 1902 and 1903, and owing to prolonged illness of the District Surgeon in 1905 no vaccination on a large scale has been lately done, but vaccination in town and country tours to the different centres will commence at an early date. On the whole the health of Middelburg during 1904 and 1905 compares very favourably with former years as the comparison of the respective death-rates will show.

In 1903 286 deaths were registered out of a population estimated at 5,000, *i.e.*, 57 per 1,000. In 1904, 432 deaths, and in 1905, 450 deaths were registered out of a population of about 23,000 inhabitants in town and District, including the Military, *i.e.*, 18·8 and 19·5 per 1,000 respectively.

As the number of births exceeds the number of deaths, there is no urgent fear of the population dying out.

The number of births registered was as follows:—1904: European, Legitimate, 195, Illegitimate, 6; Coloured, Legitimate, 133, Illegitimate, 166; Total, 500. 1905: European, Legitimate, 208, Illegitimate, 7; Coloured, Legitimate, 151, Illegitimate, 195; Total, 561.

There are only seven paupers in town drawing at present pauper rations from the Government.

The following table shows the deaths recorded during 1904 and 1905:—

DISEASE.	Europeans.				Coloured.				All Races.	
	Under 3.		Over 3.		Under 3.		Over 3.			
	1904.	1905.	1904.	1905.	1904	1905.	1904.	1905.	1904.	1905.
Measles ...	...	1	...	5	...	8	...	1	...	15
Influenza ...	...	...	1	...	1	...	2	...	4	...
Scarlet Fever...	1	...	1	...	...	...	...	...	2	...
Whooping Cough ...	...	1	...	...	3	3	...	...	3	4
Mumps ...	...	...	...	...	...	1	...	...	...	1
Diphtheria ...	4	2	12	2	4	1	8	...	28	5
Enteric ...	...	1	17	6	...	...	10	1	27	8
Infantile Diarrhœa ...	21	6	...	...	56	34	...	...	77	40
Dysentery ...	2	...	1	...	...	...	3	4	6	4
Phthisis ...	...	...	6	6	...	2	29	37	35	45
Syphilis ...	...	...	...	...	3	5	...	1	3	6
Erysipelas ...	...	...	...	1	...	...	...	...	...	1
Puerperal Fever ...	...	...	1	...	...	...	2	1	3	1
Hydatids ...	...	...	...	...	...	...	1	...	1	...
Alcoholism ...	...	...	...	1	...	...	...	...	...	1
Rheumatic Fever ...	...	...	...	...	...	...	...	1	...	1
Malignant Growth ...	1	...	...	4	...	...	6	4	7	8
Dentition Inanition ...	10	13	...	...	18	30	...	...	28	43
Senile Decay ...	...	...	...	1	...	...	5	4	5	5
Meningitis ...	...	...	1	...	1	1	1	3	3	4
Paralysis ...	...	...	...	1	...	...	...	...	...	1
Chorea ...	...	...	1	...	...	...	...	...	1	...
Convulsions ...	6	4	...	...	9	18	...	...	15	22
Croup ...	1	...	...	2	2	3	1	...	4	5
Heart Disease ...	...	...	7	3	...	...	23	14	30	17
Apoplexy ...	...	...	...	1	...	...	...	...	...	1
Asthma ...	...	...	1	...	...	...	1	...	2	...
Bronchitis ...	3	1	2	1	7	4	7	1	19	7
Pneumonia ...	4	10	5	4	7	22	23	25	39	61
Pleurisy ...	...	...	1	2	...	...	...	1	1	3
Broncho Pneumonia ...	1	2	1	...	32	43	3	4	37	49
Gastro Enteritis ...	...	2	2	1	...	37	9	17	11	57
Ileus ...	...	...	1	...	...	...	1	...	2	...
Hernia... ..	...	...	...	...	...	...	...	1	...	1
Peritonitis ...	...	...	1	2	...	1	2	1	3	4
Hepatitis ...	...	...	1	...	...	...	1	...	2	...
Nephritis ...	1	...	5	3	1	2	8	3	15	8
Cystitis ...	...	...	...	...	...	...	...	2	...	2
Hæmorrhage ...	...	...	1	...	...	...	...	1	1	1
Accidents ...	...	...	3	1	3	3	9	6	15	10
Sucide ...	...	...	2	4	...	...	...	...	2	4
Homicide ...	...	...	...	...	...	...	1	4	1	4
Slow Fever ...	...	...	...	...	...	...	...	1	...	1
Total ...	55	43	74	51	147	218	156	138	432	450

48. MOLTEÑO.

DR. W. ARCHER ISAAC, DISTRICT SURGEON.

(a) The quality of the water-supply is very good, coming as it does from the reservoir, which is supplied from two bore-holes, but the quantity is anything but satisfactory. It is, however, to be hoped that we shall shortly have a large supply

of good water, as I understand that water is to be supplied from the old dam, first being filtered, and then piped into town.

(b) and (c) As before.

(d) There is still a good deal of overcrowding among the dwellings in town used by the Natives—a few days ago I saw five Natives lying sick in one hut in the town “Location,” suffering from Enteric; doubtless this state of things will prove a fruitful source of continuing the infection and maintaining the supply of the Typhoid bacillus from year to year. Now that the water supply is good, it is lamentable that more care should not be given to isolate those suffering from such dangerous illnesses. A good Hospital is badly needed in the place.

(e) and (f) Sufficiently good.

(g) Swine are kept in town, and this should not be allowed.

(h), (i), and (k) As before.

(l) Nil, and this should be attended to. There is still a small nursing home (private), but it is not well managed, and is, therefore, useless for the majority of cases.

(m) Enteric Fever has been prevalent to an extent, especially in one portion of the town. Measles has also been very severe, attacking people of all ages, in one case the great grandfather, grandfather, father and child—four generations—had it at the same time very severely; the old man died, but the others recovered. This disease appears to be of a more dangerous character in this country than in the British Islands. Scarlet Fever, on the contrary, is of a milder nature out here.

On August 25th, 1905, an outbreak of Small-pox occurred in the town, the first case noticed was a patient of mine in the private nursing home, whom I had operated upon for Tumour of Liver. At first I could not trace the source of infection, but upon close enquiry, it was found that the nurse in charge had some time previously engaged a woman with two children (Native) to work for her. When she engaged the woman the children had the Small-pox rash fully developed upon them, the nurse diagnosed that they were suffering from Measles, and never reported the cases, actually allowing the woman with one child on her back to work in the Hospital wards, thereby infecting the patient with Small-pox. These Natives had come from Tollkop, where several had suffered from the same disease, yet it had never been reported. I feel confident that numerous cases of Small-pox arise on the farms and are not attended to. A year or two ago the outbreak at Sandfontein Collieries was traced by me to a Native who had died of an eruptive disease and had been buried without any *post-mortem* examination having been made. Had such examination been ordered there is no doubt but that that outbreak would have been nipped in the bud and a good deal of expense spared. A few days ago a farmer told me that there was a Native girl suffering from some eruptive disease—probably Syphilis or Small-pox—out at his farm. I told him to report the matter to the Resident Magistrate, but I have heard nothing further about it. I think a policy of “penny wise” is very often “pound foolish.” With regard to the aforementioned outbreak, the Municipality at once took proper precautions and had all the cases isolated and properly attended to, with the result that on October 21 the disease was eradicated. During the time there were in all five cases—three Europeans and two Coloured. I vaccinated 220 individuals, and a large number were done by some of the police. I may here remark that this year I have attended no centres in the District for vaccinating the children of the farmers, etc. I think this ought to be seen to. It is impossible to give an opinion with any accuracy on the results of the vaccination, but I believe they were of a fairly successful nature. The Local Authority did all in their power to stamp out the disease. There were no deaths. Five guards were employed and the whole town population, European and Coloured, were under surveillance. The total cost incurred in dealing with the outbreak by the Municipality is, I understand, £147 13s. 5d., of which four-fifths is to be paid by the Government.

There have been some few cases of Scurvy, but I think there are numerous cases of Syphilis which are not brought to my notice and remain untreated among the Native miners of this District.

49. MONTAGU.

DR. C. A. WESSELS, DISTRICT SURGEON.

(a) The water-supply is ample, and the quality of the water is unexceptional. The intake is high up in the mountains, free from any possible source of pollution.

A scheme for increasing the quantity of water available for the higher-lying portion of the village was commenced in 1904 and completed in the early part of 1905, so that at present every part of the village has a sufficient supply of pure water.

(b) There are no properly constructed sewers; the drainage of the village is effected by means of open sluits.

(c) Night-soil is removed by cart, and taken to pits dug about a quarter of a mile from the southern border of the village. W.C.'s are emptied every fortnight at least, and sooner if required.

Slop-water is in all cases simply thrown into the back-yard, from there to drain into the furrows along the sides of the streets, or to sink into the soil of the yard. Refuse is taken away at irregular periods by the Municipal cart.

(d) I am not aware of any case of overcrowding among European families or the few Coloured families who dwell outside the Location.

The majority of houses are of recent construction, and there are no dwellings unfit for human habitation.

(e) There are no slaughter-houses in the village; the killing of butchers' stock is done some distance outside the town in places licensed and controlled by the Municipality.

The bakeries are clean, and carried on in places suitable for the business. There are no dairies; most inhabitants keep a cow for their own use.

(f) The Sale, etc., of Human Food.—This is carried on much the same as in other places; I am not aware of anything injurious to health in connection therewith.

(g) The majority of inhabitants keep cows, generally in stables in their yards. Pigs are kept in styres in nearly all the yards of dwelling houses.

(h) The Locations are in a cleaner and more sanitary condition than they were when I made my last report; overcrowding has also to some extent been abated in the Location. Disorder and lawlessness are still prevalent in the Locations, and cases of assault of frequent occurrence.

(k) The burial-grounds are in a satisfactory condition.

(l) We have no Hospital in the District; even the gaol has no place for the treatment of sick prisoners.

(m) Diphtheria.—We had a recurrence of the outbreak of Diphtheria of 1903 in the early part of 1904. It is interesting to note that the first four cases occurred in houses where there had been Diphtheria the previous year—clearly an occurrence of house-infection. The epidemic spread generally through the District, even to remote farms.

There were in all about forty cases of Diphtheria, and six deaths during 1904.

In 1905 eight cases of Diphtheria occurred, and no deaths.

As to the steps taken to combat the disease, we isolate the patients and employ the serum treatment both for those already ill as also for contacts where possible.

In every case where it was employed in time I have found the antitoxin effective.

Enteric Fever.—During 1905, commencing in January, a serious outbreak of Enteric occurred at a farm called Rietvlei No. 2, about six miles from the village. There were in all twelve cases, of whom three died. This epidemic was clearly traced to drinking water.

In the village four cases occurred during the same period.

We have had no cases of Small-pox or Measles during 1904 and 1905.

50. MOSSEL BAY.

DR. C. KITCHING, DISTRICT SURGEON.

(a) The water-supply is obtained from a mountain stream, the Kleinbosch River, rising in the foot hills of the Outeniqua Range. No source of contamination exists at the intake as far as can be ascertained, and none along the pipe track. Beyond a small percentage of mineral or vegetable colouring matter the water is of the highest purity and absolutely wholesome. It is received into a reservoir on some ground westward of the town, from which it is distributed to the town. A steam pump raises the water to a subsidiary reservoir higher up still, which supplies the part of the town not to be reached by the lower reservoir. The supply has stood the test of fairly prolonged dry weather,

(b) Sewerage and drainage are managed by drains of cut stone for the most part, the crossings being by means of earthenware pipes which are intended to obviate a deal of effluvium attendant upon ordinary mason work drains which offer points of attachment to debris and consequent blockage results. The whole system is kept flushed with fresh water or with that obtained from the old surface supply in vogue for hygienic and culinary purposes before 1885, when the present Kleinbosch River supply began to be used. Expense appears to be the reason for not utilising seawater which is far superior as a purifier and the supply never changes, whereas the amount of flushing required, especially in the hot weather, could scarcely be looked for if the freshwater supply is to do that and supply the town as well.

(c) Night-soil is collected and regularly removed in specially constructed buckets supplied by the Municipality at a certain rate, the removal of the buckets being in the hands of a contractor. In Enteric cases specially designed receptacles with lids are supplied on notification and for the removal of these the Municipality pays a certain extra fee. Night-soil is shot into the sea at a point north-east of the centre of the town, the buckets being there well cleansed before being returned to their different owners.

Slop-water is conveyed down the cut stone drains aforementioned, ultimately finding its way into the sea.

Household and other refuse are collected in boxes or casks outside the different dwellings and removed by Municipal scavenging carts.

(d) Owing to very much increased vigilance and a system of surprise visits paid at night under police protection to the localities where overcrowding may be presumed to exist, this has been very much lessened. It is impossible practically to do away with it; for instance in the case of a room rented by a coloured man and wife there may be a family of half a dozen children; he cannot afford to rent more than one room. It is at night mainly that overcrowding is to be met with.

As to dwellings unfit for human habitation, these have been as far as possible eliminated, the Municipality taking steps on the recommendation of their Sanitary Inspector and notifying the offending parties and then, failing proper notice paid to representations, putting the law in motion. This has had a very salutary effect.

(e) Slaughter of animals is confined to a spot between the railway line and the sea, rather over a mile distant from the town; the places are cleanly kept.

Butcheries, Bakeries, Dairies, etc.—Nothing objectionable to be mentioned under this head.

(f) Nothing to be added to last report hereon.

(g) Swine are not kept within the town. Some years have passed since their presence was disallowed by Municipal Regulation. Cattle, chiefly milch kine, are kept by different people, and there is no complaint affecting the way they are kept.

(h) There are two locations of Natives under Municipal control, the one location half a mile, the further a mile from the town, on the slopes of the hill south of the George Road. Both are kept in very fair order, the habiting of any undesirable structure is prevented, and nothing like the unsightly collection of bough of trees and old sacking is allowed. Regular latrines also are provided in both locations, doing away as much as possible with insanitary habits.

(i) Cemeteries, etc.—Nothing to be added to in this respect over and above what appeared in last report. A movement is on foot to obtain ground to the south side of the Cape Road, a mile from the town, to be used by the different religious communities in view of the present allotments being no longer available.

(k) Abatement of nuisances generally tend to disappear as improvements, such as the laying of open cut stone drains, progress.

(l) Hospital accommodation, absolutely nil, beyond the Lazaretto erected by the Municipality for any Small-pox breaking out here. Subsequently the Plague Authorities used the building as a Hospital, and it is still at their disposal. It is a wooden building containing three rooms, and might, at a pinch, accommodate eight patients.

(m) The following cases of infectious disease occurred during the years 1904 and 1905:—

1904—Enteric Fever, Europeans, 11 (1 fatal); Coloured, 32 (5 fatal). Scarlatina, 1 European. Diphtheria, Europeans, 2; Coloured, 1.

1905—Enteric Fever, Europeans, 2; Coloured, 2 (1 fatal). Scarlatina, Europeans, 3; Diphtheria, 1.

There was a marked diminution of cases of Enteric Fever in 1905 as compared with previous years. No particular neighbourhoods were specially marked out for visitation, and no particular causes can be assigned for the occurrence of the different cases. It cannot be traced to milk or water distribution. Pre-

sumably where it is impossible to guard against dissemination of poison through non-observance of hygienic rules, the cause must be found in failure to carry out the proper disinfection of excreta, clothing, etc.

In 1904, January, February and April and May furnished the larger number of cases of Enteric Fever which gradually tailed off during the latter half of the year; there were only three cases for the whole of the following year 1905, and these in the latter half of the year.

Under a previous heading, as one of the steps to suppress the disease or prevent no further spread, was mentioned the supply of special buckets with covers for the reception and removal of all excreta. Isolation of sick was impossible from lack of means to carry out the measure. The surveillance of matters in connection with the carrying out of precautions devolved upon the Sanitary Inspector, who saw to the proper carrying out of such measures provided by the Municipality and to whom any shortcomings on the part of the Sanitary Contractor or his servants were reported, *i.e.*, failing to remove such special receptacles and emptying their contents within the Municipal area on such ground not set apart for the purpose. The Municipality is the body responsible for the carrying out of what precautionary measures there are available such as the providing of such disinfectants in such quantities as prescribed by the medical attendant in cases where the position of the patient made purchase of such necessities impossible; as well as the providing of the special receptacles aforesaid on notification by the medical attendant.

There has been no considerable outbreak of Measles here during the past two years—merely sporadic cases.

With regard to Small-pox, since the Lazaretto was put up there has only been one case, and that, by no means definite, over twenty years ago.

Vaccination.—In the absence of a second visit paid to each centre, and the enforced attendance of the vaccinated persons on such second visit, there is no accurate means of determining the amount of success attending the vaccination. One can only judge from results of urban vaccination, and these have been very satisfactory.

51. MURRAYSBURG.

DR. P. H. WARD, DISTRICT SURGEON.

This report only embraces the year 1905, my appointment commencing only in January, 1905.

The health of the Murraysburg District during this period has, on the whole, been satisfactory.

(a) The public water supply for drinking purposes is obtained from three sources.

(1) Two wells from which the water is pumped up by means of an ærmotor. Both these wells are subject to contamination from neighbouring cesspools. They are frequently empty.

(2) Water conveyed from the river, nearly a mile distant, by means of an open furrow. This water is obviously exposed to contamination from many sources. The Natives prefer this furrow water to the well water. European children drink from the open furrows in the street.

(3) Rain-water collected and stored in private tanks.—The inhabitants allow the first rain-water off the roofs to run away, and then turn the water into their tanks. Consequently they are satisfied that the tank water is clean and safe for drinking purposes, and adopt no further precautions. Every summer as a consequence severe intestinal complaints of the nature of Diarrhœa and Dysentery occur. This epidemic, corresponding with the fruit season is always attributed by the public to the fruit. It is extremely probable that the water is an exciting cause. Many of the inhabitants keep pigeons, and it is at least possible that these may contribute to the contamination of the water.

The Natives who drink furrow water suffer most severely, especially Native infants, from intestinal complaints during the summer months.

(b) There is no system of sewerage. Surplus flood water is drained away by means of open furrows.

(c) Night-soil is mostly deposited into cesspools. Some cesspools in the village have been in existence for years, and are very foul. In one or two isolated instances the pail system is adopted, the individual paying to have the pails emptied outside the village. Every year the cesspool nuisance will increase and become a greater danger to the community. The pail system should be adopted universally.

Slop-water is deposited into cesspools, private gardens, or yards, or even into the public street.

Household refuse is collected by a contractor, in the employ of the Municipal Council, and carted outside the village.

(*d*) The ventilation in the houses of some of the poorer inhabitants is extremely bad, probably through ignorance more than owing to structural defects. It is in these houses that cases of severe Ophthalmia occur.

(*e*) There are three butchers who supply the public regularly. The butcheries are well kept, and blood and offal deposited outside the village. Private individuals slaughter occasionally, and place meat on the market. There is one bakery, which is well kept. Milk is sold by private individuals keeping cows, when there is an excess over what they require for their own use.

(*f*) There is one butcher's shop in the village, which is well kept. Other meat is exposed for sale on the public market. I have heard no complaints as to the quality of meat or other food stuff sold.

(*g*) The few cattle kept in the village run on the veldt by day and are kraaled at night. Swine are scarce in the village.

(*h*) The huts in the Native Location are badly ventilated and overcrowded. The ground in the immediate neighbourhood of the huts is cleanly kept, but rubbish, old clothing, old tins, and bones are deposited in the rear of the Location, within fifty yards of the huts.

(*i*) The European and Native cemeteries are well situated outside the village, and well kept.

(*k*) There is nothing to report under this heading.

(*l*) A Hospital for isolation exists; at present there seems some doubt as to whether it belongs to the Municipal Council or to the Government. Originally built for a Small-pox Hospital—for which purpose it is useless owing to its situation in close proximity to the village and within one hundred yards of the Native Church and Gaol—it is at present let as a residence to private individuals. Further accommodation for the purpose of isolation consists of two tumble down Native huts, situated some quarter of a mile away from the Location. Proper disinfection, or in fact any disinfection of such huts is impossible from the nature of their structure. During the year necessity has arisen to isolate suspicious cases, and the accommodation has been totally inadequate.

(*m*) Enteric Fever.—There have been five cases during the year. The cause is obvious when one considers the number of cesspools in the village. Isolated cases occurring from time to time always create a fresh supply of contaminating material. The number of cases of Enteric has decreased of late years in the village, but these have been years of drought. With continuous rains the number of cases of Enteric would in all probability increase.

Diphtheria is from time to time breaking out in the village. There have been six cases during the year. As mentioned in the previous report the medical practitioner has frequently to treat the patient gratis—and in addition pay for the antitoxin out of his own pocket. Antitoxin should be provided in those cases unable to pay for it at the public expense.

Neither Enteric or Diphtheria can be said to have occurred in epidemic form in 1905.

Amaas or Small-pox.—On April 19th a Native child was brought to me by its father, who wished me to certify the child was in a fit condition to return to the farm where he was employed. It appeared that three weeks previous the child had been sent into the village by the farmer, as he supposed it to be suffering from some infectious disease. I was informed by the father he had been granted a pass to stay in the location by a member of the Municipal Council. He denied that a medical practitioner had been consulted as to the nature of the disease, before the pass had been granted. The child had not been seen by anyone during the three weeks it was in the location. When seen by me, three weeks after the onset of the disease, the child had both arms and legs and, to a lesser degree, face and body, covered with scabs, presenting the appearance of having suffered from some severe pustular disease. At this stage of the disease accurate diagnosis was almost impossible, but the appearance of the child was identical with that presented by convalescents from an acutely infectious pustular disease, which I had had an opportunity of observing the previous year in an epidemic which spread through the Native Location of a large mine in Rhodesia, one white man having been attacked in this Rhodesian epidemic which I considered to be Amaas. I considered the Native child under examination to be suffering from the same complaint. Dr. Heinrichs, who very kindly saw the child with me, concurred in the diagnosis and the necessity for isola-

tion. A visit to the hut where the child had been staying was made, and a woman was found also suffering from a pustular eruption, which later proved to be due to Potassium Iodide. The child and all its relatives, together with the woman and her family, were isolated, having all been in close contact with the patient. A second adult male was sent from the same farm suffering from a pustular eruption over the body and face. After a few days' observation this patient was considered to be suffering from Syphilis, a diagnosis which a *post mortem* later verified. The patient and eleven suspects were isolated till May 13th, during which period they were all successfully vaccinated, including the patient, who had never been vaccinated before. No fresh cases having occurred, they were then discharged. The Municipal Council did all in their power to help in the isolation of the patient and contacts, and provided a guard and quarters. Total cost of this outbreak, £16 12s. 3d., borne by the Municipality. During the latter half of 1905 there has been an epidemic of Scarlet Fever. Sixteen cases were notified. All the cases were mild. Other cases occurred where a doctor was not consulted. No attempt was made to isolate the patients strictly, except while the patients were actually ill.

A case of Leprosy in a Native child was notified and removed to Robben Island.

A male Native was certified to be a lunatic and removed to Grahamstown Asylum.

There has been no case of Measles during 1905.

The number of Syphilitics treated during 1905 shows a decrease to that of 1904. 41 Syphilitics were treated in 1904, 29 in 1905. The fact that patients frequently allow an interval to occur before seeking a fresh supply of medicine prolongs the period of treatment. Several patients lapsed from treatment, and could not be traced. The paupers drawing rations show a slight increase. 7 were admitted in 1904; 9 in 1905.

No public vaccination has been performed in the District since the beginning of 1903.

The number of deaths in 1905 were 38:—

European, adults, 9; European, infants under 1 year, 2, Gastro Enteritis Premature Birth; Native, adults, 12; Native, infants under 1 year, 12; Native, children, 3.

The infantile mortality amongst the Natives is heavy. The causes of death were:—

Gastro Enteritis, 1; Enteritis, 1; Diarrhoea, 1; Malæna Neonatorum, 1; Pneumonia, 1; Bronchitis, 1; Marasmus, 1; Strangulated Diaphragmatic Hernia, 1.

Returned by Field-Cornets, Convulsions, 3; Influenza, 1.

Native children under 12, Pneumonia, 2; Obstruction, 1.

52. NAMAQUALAND.

(i) NAMAQUALAND.

DR. M. W. W. COWAN, DISTRICT SURGEON.

(a) The methods of the water-supply of the district have undergone no material change since my last report. Although the rainfall during 1905 has been markedly larger than that of immediately preceding years yet towards the end of the year there was a distinct scarcity of water in many of the wells used for household and drinking purposes.

Coincident with this scarcity Typhoid made its appearance in some parts of the District. Springbokfontein itself has been free from the disease except with regard to imported cases (cases imported for treatment).

(b) Sewerage and Drainage.—I have nothing to add to my remarks on this subject in previous reports.

(c) Disposal of Night-soil, etc.—In the mining villages these matters are well arranged. In Springbokfontein much is left to be desired. A Village Management Board has been petitioned for, and this is one of the matters I hope it will take up.

(d) There is no overcrowding in European dwellings, and there is marked freedom from Tubercular affections among Europeans.

The Natives do not share this immunity from Tubercular disease. Mostly their huts, although very freely ventilated, contain a large number of people. The bacillus of tubercle undoubtedly resides in the soil of certain parts; this, repeated observation has impressed on me. I put a large amount of tuberculosis, among

Natives in long standing locations, down to this cause. When Tuberculosis breaks out in a location, the healthy folk should be ordered to remove, the place should be marked and not again be used for habitation purposes. I have seen a squad of Natives return to a tubercular centre not many yards in circumference, and 50 per cent. of the members of three large families develop the disease in a virulent form.

(e), (f) and (g) On these subjects I have nothing to add to previous reports.

(h) Hitherto there has not been a definite Native location in Springfontein. Lately the Natives immediately around the village have been collected into a location which will be under the authority of a Village Management Board, when such is elected. The location is healthy and spacious.

(i) and (k) These have been previously sufficiently dealt with.

(l) There is no Hospital accommodation for infectious diseases. Small-pox has been dealt with in a camp, and a camp, I think, will meet the requirements of any epidemic with which we are likely to be called upon to deal.

(m) In connection with this whole subject I would very seriously draw the Government's attention to the lamentable shortness of Native Police in Namaqualand. That a large mining centre like Concordia should be without any representative of law other than a J.P. means just absolute inefficiency not only in the most important subject of public health, but also in the matter of the prevention and detection of crime. This subject affects public health in many ways, but to mention a few.

1. Vaccination.—One complete attendance at, say, Concordia once a year for vaccination purposes should be enough; but how can one expect even a fair attendance, out of a population of between two and three thousand, if there is not even a single resident Native policeman to collect them.

2. The lack of police, especially Native resident police, affects the working of the Contagious Disease Acts. The disease quickly becomes reported to such men and quick treatment, pre-eminently in this disease, means stopping of spread. The knowledge that a woman is under treatment is sufficient deterrent for Native as well as European men.

3. In secluded Native centres no one knows what diseases are about or what crimes are being committed. An epidemic might devastate some Native districts before it is officially reported and known. This is not far-fetched; we had a suggestion of what might occur in 1905, reported under "Influenza."

Typhoid.—There were five cases in O'okiep and two in Concordia occurring early in October, 1905. Cases still were occurring early in 1906.

Small-pox.—A few sporadic cases occurred here and there, the disease to all intents and purposes is suppressed. It attacks those few Natives who have escaped the Vaccination Act.

Influenza was very prevalent throughout the latter half of 1905; generally the epidemic was of a very mild type. Among a certain location of Hottentot refugees from German South-West Africa, Influenza made its appearance about October, and with it an epidemic of a very fatal nature attacked young children. The Natives, who only speak Hottentot and some bad German, did not report the disease till several had died, and consequently I only saw one real case, fortunately the last. The child was in collapse, there was no rash, the lungs were clear except for some congestion at the back, the child had the Typhoid facies and had been constipated all the time. The Natives could not give much information, partly from the language difficulty and partly from, possibly, lack of intelligence. The disease evidently began and ceased with great suddenness. It was contemporary with and possibly allied to the Influenza.

Syphilis is publicly much less seen in Namaqualand than when I came here first, about ten years ago. Cases, of course, still occur, but they do not obtrude on the observation of everyone.

Measles have attacked Concordia, but the cases have not been very numerous.

Scarlet Fever.—One case existed in O'okiep during October, 1905.

(ii) SUB-DISTRICT OF GARIES.

DR. R. C. VERNON, DISTRICT SURGEON.

In submitting my health report for the years 1904 and 1905 I wish to state that it does not apply to the whole of that period, as I was absent from the District from August, 1904, until June, 1905.

(a) The water-supply continues to be derived in most cases from wells dug in the river bed, which run considerable risk of pollution. To obviate this I think

measures should be enforced to prevent all washing of clothes in their vicinity, that a spot be selected for a Native Location outside the village in order to prevent Natives from erecting huts in the vicinity of the wells, and in many cases using the river bed as a suitable spot for relieving nature.

(b) There is no system of sewerage and drainage.

(c) As regards the collection and disposal of night-soil, etc., the various inhabitants make their own arrangements, with a view to preventing the possibility of night-soil being buried in the river bed, I should suggest that a Board of Village Management be started, whose duty it would be to see that a suitable spot be selected for the disposal of nightsoil.

(d) There are no overcrowded dwellings or dwellings unfit for human habitation.

(e) None exist.

(f) The sale, storage, and preparation of human food leave nothing to be desired.

(g) Swine in the few cases in which they are kept by the inhabitants are confined at a suitable distance from the dwelling houses. The various stalls in which horses and cattle are confined are, as far as I have had opportunity to observe, kept in a cleanly state.

(h) There is no Native Location.

(i) Suitably situated.

(k) Same as last report.

(l) There is no Hospital.

(m) There have been no cases of Small-pox in the District, nor has there been any epidemic of infectious disease. One case of Diphtheria occurred in 1904, which was successfully treated by Anti-Diphtheritic serum. Public vaccination was not performed during the years 1904 and 1905.

53. OUDTSHOORN.

(i) OUDTSHOORN.

DR. GEORGE RUSSELL, DISTRICT SURGEON.

In reporting on the general health of the District for the years 1904 and 1905, it must be stated that no epidemic of any disease took place during that period. There have been cases of Enteric Fever not only in town but also in the District, yet the number of cases on the whole has not been above the average. Diphtheria is continually cropping up, but if medical assistance is called in at an early date, the disease is soon checked by the inoculation of the household and all contacts. The Municipality and Divisional Council are prepared to refund the actual cost of the serum used in all cases where it is beyond the means of those infected.

(a) The water-supply is good, but up to the present, it has not been extended to several parts of the town; standards have been erected in all directions to enable the inhabitants to obtain water; still it is to be hoped that the extension of the water system will be carried out at an early date.

(b) There is no system of sewerage or drainage. The main water furrow which is used for the irrigation of the gardens, is rapidly becoming a sort of common surface drain. It has been proposed to pave this furrow, which would materially assist the sanitation of the town.

(c) The collection of night-soil is very good, but the sooner the Town Council takes this matter over entirely, and carries out the working of the system by its own men, the better. Private contractors cannot be trusted to perform the work. The charges for the removal of night-soil are simply absurd, and the sooner this system is suspended, and a general rate levied, the sooner will the Sanitary Officers be able to carry out their system perfectly, and the general welfare of the community will be greatly benefited thereby. Slop-water and household refuse are removed by the Council carts at stated times.

(d) The general condition of the dwellings is improving in the town, but there are still cases of overcrowding.

(e) It has been under consideration for some considerable time that the Council should build public slaughter-houses and washeries, but public funds will not permit. The other trades affecting health are under the inspection of the Sanitary Superintendent.

(f) All stores and shops, etc., are inspected by the Sanitary Authorities.

(g) The keeping of cattle, swine or other animals, has to be sanctioned by the authorities, and such places are under the inspection of the Sanitary Authorities.

(h) It is the intention of the authorities to remove the position of the Location to a portion of Geelboschlaagte. If the new Location is properly laid out, and is connected by piping with the general water-supply, then there is no doubt but it will materially affect the overcrowding of many parts of the town; as the presence of water standards in the ground would be the means of inducing many to build huts according to Municipal regulation and live there.

(i) The new cemeteries are enclosed, and a large number of trees planted within the several enclosures.

(k) The abatement of nuisances generally has been receiving the attention of the Council, and the general condition of the town is becoming very satisfactory. The main and side water furrows require paving.

(l) There is no Hospital accommodation for the isolation of or treatment of infectious diseases.

(m) There is a Small-pox Camp, or rather material for forming a camp in Geelboschlaagte. This is under the control of the Municipality.

One case of Small-pox occurred in January, 1904. The case occurred in Schoeman's Hoek, and was taken over by the Municipality. The source of infection could not be ascertained.

There has been no epidemic of Measles or any other disease resembling them in this District.

During the period 1,362 have been vaccinated; but this can in no way be taken as the actual number vaccinated in the District, as it only represents those recorded by the District Surgeon.

The question of Syphilis is one which will sooner or later require the serious consideration of the authorities. The class of females occupying the position of servants would be greatly improved and the spread of the disease materially affected, if those employing such people would combine and engage all servants for periods of not less than six months, and give them proper rooms or accommodation to sleep in on the premises. There can be no doubt but that at first this would be met with great opposition on the part of servants, but this difficulty would be overcome, and a healthier and happier tone would prevail in our homes. There can be no question but that the disease is spreading amongst the whites, and this is due entirely to their own carelessness as regards the conditions of their servants. The disease in its primary form is seldom met with, and the spread is not due to immorality, but to the children being contaminated by the servants, and the parents are infected before they are aware of the nature of the disease with which their innocent children have been polluted.

Taking the district as a whole, it can be stated that the general condition of the farm buildings has improved materially, and the building of tanks for the storage of rain-water is now considered to be an absolute necessity, so as to enable them to have a pure and abundant supply of water for domestic purposes. The farming population is realising the fact that it is only by the storage of rain-water that will enable them to combat with the diseases which are known as water-borne. The irrigation system carried out on the various rivers has rendered the water in the sluits or river absolutely unfit for domestic purposes. A case of Enteric Fever in a house situated on the upper reaches of any of the streams would have the tendency to pollute the whole river.

The village of Dysseldorp, situated about sixteen miles from Oudtshoorn, has its own Board of Management, but to all appearances the inhabitants seem to take very little interest regarding the streets of the village, the water-supply, or its sanitation.

The water-supply is obtained from natural springs situated above the village, and it is sufficient at all times for household purposes. One spring is set apart for drinking purposes, and an attempt is made to keep the water as clean as possible. This spring could be cemented out, and by means of a pipe the water could be carried out to the main street, and thence to the school for the use of the school-children. The distance is not great, and the total cost would not be very heavy.

The sanitary arrangements are very primitive, and to all appearances they are not improving.

The church grounds have been lately enclosed with a substantial wire fence, and trees have been planted round the enclosure, but it is to be hoped that the same will be carried out as regards the school, and the necessary buildings added for the children's comfort and convenience.

(ii) SUB-DISTRICT OF CALITZDORP.

DR. L. F. McDOWELL, ADDITIONAL DISTRICT SURGEON.

(a) Same as previously reported.

No steps have been taken to prevent contamination of the drinking water to village, and household washing continues to be carried on in Nel's River. I again strongly recommend that something be done to prevent this nuisance.

(b), (c), (d), (e), (f), (g), (h), (i), and (k) Same as previously reported.

(m) Within the last eighteen months there have only been three or four cases of Diphtheria and Enteric. There have been no cases of Small-pox.

Public vaccination in the District was carried out during December, 1905. I vaccinated 603 cases. As a second visit to each centre is not allowed, it is impossible to say what percentage were successes, but from what I hear there were extremely few failures.

54. PAARL.

(i) PAARL.

DR. R. WOLFE, DISTRICT SURGEON.

(a) The water-supply is good but insufficient. The deficiency could be made good if larger main pipes were used. Many of the inhabitants use well and river water.

(b) There is no system of sewerage and drainage. The town is intersected with sluits or furrows into which slop-water and refuse are thrown. The open furrow in the Main Street is a most offensive nuisance, and is a grave danger to the health of the community.

(c) The sanitary pail system is still "under consideration." The cesspool system is still in use, and cannot too strongly be condemned.

(d) Overcrowding exists to a large extent amongst the Coloured population, and as a result consumption is very prevalent.

(e) The management of slaughter-houses, butcheries, bakeries, and dairies is satisfactory.

(g) Cattle and swine are kept within the Municipality, the latter I think should be interdicted, especially in the more crowded portions of the town.

(i) Cemeteries and burial grounds within the Municipality I believe are receiving the attention of the Government. It is, I believe, proposed to close some of them and have a cemetery site outside the limits of the Municipality.

(k) A Sanitary Inspector is employed by the Municipality.

(l) No Hospital accommodation exists for the proper isolation of infectious diseases. There is a small one-room building which can be hardly designated by the name Hospital. This, augmented by a number of tents, has been used by the Municipality during the prevalence of Small-pox. As regards the Divisional Council, during the prevalence of Small-pox in the District in 1904 and 1905, the outbreak was successfully dealt with in the Quarantine Camp to which all patients were removed.

(m) As regards the spread of infectious disease, especially Small-pox, great difficulty was experienced in checking it, owing to the obstinacy of the residents of the town and District who firmly refused to believe that the disease was Small-pox, and looked upon it lightly as Chicken-pox or "Water-pox." This difficulty was enhanced by the dilatoriness of the people in reporting suspected cases, and in the town itself, although the outbreak of the disease was notified to the Local Authority, the Municipality, and was known to exist by that body, some two months elapsed before the most elementary steps were taken to check the spread of the disease. The Coloured people, who were in most cases the victims, were continually travelling about between the Cape Peninsula, neighbouring Divisions, and Paarl, and as the period of incubation permitted them to proceed unsuspected from one place to another it too often happened that the disease developed in some place other than that of the source of infection. For the last eight months the District has been free from this disease. This I mainly attribute to the Government measures taken for wholesale vaccination and the determined effort made by the Divisional Council to deal with and isolate cases brought to their notice. No deaths occurred. As regards

Enteric and Diphtheria, I regret to have to state that these diseases have become endemic instead of epidemic, and cases have been continually occurring during the period covered by this report. Several deaths have occurred from Diphtheria, and many have been cured by the liberal use of Antitoxine especially amongst the pauper class. Deaths have also occurred from Enteric. Both diseases have obtained a firm footing in the town, and it will be impossible to eradicate them until such time as the Local Authority awake to the fact that some action is necessary to protect the public health, which by legislative enactment is unfortunately committed to its care. The existence of open furrows alongside the main and other streets of the town into which slops and other refuse flow, giving forth offensive odours, contribute largely to the unhealthy state of the town. The absence of any sanitary measures such as the removal of night-soil, etc., is also reprehensible. I am afraid that the Municipality does not attach sufficient importance to the necessity for taking active and remedial steps for suppressing and prosecuting generally the spread of disease, and I am inclined to think that owing to this laxity on its part, the townspeople are careless and negligent in reporting such cases of infectious disease and preventing its spread to their neighbours.

I would like to mention that out of a total death roll of 605 in 1904, 106 were due to Phthisis, and in 1905, 97 out of a total of 705 died from the same disease, thus giving you an idea of the prevalence of this disease, especially amongst the Coloured population. In 1904 there were 20 deaths from Enteric Fever, and in 1905, 17. Diphtheria was responsible for 23 deaths in 1904 and 5 in 1905.

These figures apply to the whole District including the townships of Wellington and French Hoek.

(ii) SUB-DISTRICT OF WELLINGTON.

DR. C. D. MALAN, ADDITIONAL DISTRICT SURGEON.

It is difficult, nay almost impossible, to give a reliable report of the health of Wellington and District during the years 1904 and 1905, but as far as I could ascertain from the insufficient data at my command, it has been fairly good. Estimating the population included in the Magisterial area of Wellington at 3,400 Europeans and 3,100 Coloured, the births and deaths per 1,000 were as follows during the two years:—

			Births.	Deaths.	Births.	Deaths.
			European.		Coloured.	
1904	...	...	25·0	11·47	49·6	45·1
1905	...	...	27·0	10·58	63·2	39·0

It will thus be seen that while the birth and death-rate of the Europeans was fairly constant, the birth-rate of the Coloured largely increased, whilst there was a gratifying fall in their death-rate. I attribute this, to a great extent, to their leaving the town and settling on the farms outside, where they get better housed and fed. During the war there was a large influx of blacks into the town, but what with the bad times and high rents in the village, they are gradually drifting back to the farms. This is only as it should be, and if only our Municipality would strictly enforce the Act *re* overcrowding, we would have still fewer deaths to record.

(a) As regards our water-supply, there is nothing new to add to my report of previous years; it is pure both at its source and on delivery, but barely sufficient for the size of the town. The Municipality have a scheme in hand to build another reservoir, but I believe that want of funds stands in the way of its realisation. In summer the inhabitants of the town are simply stifled in dust, and the use of water-carts is not only expedient but an absolute necessity. It is an undoubted fact that many cases of Pneumonia and Tuberculosis can be traced to the inhalation of dust laden with the germs of these diseases. One watercart was acquired during the year 1905, but has had to stand idle most of the time for lack of water.

(b) There is no system of sewerage and drainage, unless one wishes to call the river passing through the town a sewer. It is, at any rate, used as such by many inhabitants with the result that it emits anything but a pleasant smell in summer when the water in the river bed is low.

(c) Night-soil is collected in buckets and buried in trenches on the commonage. The system is well and economically worked. Slop-water is disposed of by each householder as he thinks best; it is mostly thrown into the gardens or given to pigs. A cart owned by the Municipality collects household and other refuse, but the system can be materially improved.

(d) Several houses in the Native quarter are overcrowded and have been for a long time, but no steps have ever been taken to remedy this. As far as I am aware there are no dwellings unfit for human habitation.

(e) Slaughtering is still permitted in the town, and I have nothing to state regarding the management of butcheries beyond remarking that it would be well for the Municipality to keep a more watchful eye upon their cleanliness. The same remark applies to bakeries, dairies and other trades affecting health.

(g) Cattle, swine and other animals are fairly well kept, and I do not know of any disease caused by them.

(h) Nil.

(i) Cemeteries and burial-grounds in active use are now all outside the village, and with the exception of one Native burial-ground, well situated.

(l) We have no Hospital accommodation.

(m) Deaths from the undermentioned infectious diseases in the Magisterial area were as follows:—

1904: Enteric Fever, 6; Diphtheria, 0; Measles, 5; Small-pox, 0; Tuberculosis (including cases certified as Meningitis with Convulsions), 25.

1905: Enteric Fever, 2; Diphtheria, 1; Measles, 0; Small-pox, 0; Tuberculosis (including cases certified as Meningitis with Convulsions), 44.

The remarkable fact about these figures is the great increase of Tuberculosis, for it may be safely assumed that most, if not all, the cases of Meningitis with Convulsions are tubercular in origin. In our division Tuberculosis during life is not one of the notifiable diseases, but the sooner it is proclaimed the better it will be, as one could then have some sort of supervision over these cases.

We had two outbreaks of Small-pox, one in 1904 and the other in 1905. That in 1904 occurred outside the village, in a group of houses inhabited by a number of poor whites. It was first discovered on the 19th September, 1904, and spread to all the houses. The first case was probably infected from the Paarl, as the patient stated that she had been in contact there with a person who "had an eruption." The patients (six in all) were Europeans; there were no deaths and the last case was discharged on the 18th October, 1904. The Municipality acted as "Local Authority" and gave me every assistance in suppressing the disease.

The second outbreak was much more extensive, the first case being discovered in the village on 7th February, 1905, and the last case was not discharged until the 10th June, 1905. On the whole the disease was mild, the death-rate being nil. It was remarkable that not a single European was attacked, the reason being, in my opinion, that they were more efficiently vaccinated than the coloured people, and do not move about so much. A thorough vaccination was then performed by me on all those not previously or not successfully vaccinated, and the result was that although we had seven different centres in which the disease made its appearance it was comparatively soon stamped out. The difficulty was to get people to notify, as on account of the mildness it was not greatly feared. I thereupon got one of the guards to go about from house to house daily in order to make enquiries about suspicious cases of eruptions. Both the Municipality and Divisional Council rendered efficient aid, although at first I had some trouble to convince the former that the disease was actually Small-pox, and that they should isolate the patients properly. In my opinion, a more efficient house-to-house visitation should be made when an epidemic is raging, especially among the coloured people, as they are very apt to hide the disease. In 1904 we had a mild epidemic of Measles, five deaths being notified as caused by that disease, but it died out entirely during 1905. Enteric Fever was also less in 1905 than in the previous year, only two deaths being registered throughout the District. How many cases occurred that did not die is impossible for me to say.

55. PEDDIE.

DR. TEMPLE SMYTH, DISTRICT SURGEON.

(a) Rain water collected from iron roofs of dwellings and stored in under and over ground tanks of stone or metal, forms the European drinking water supply.

The Natives have suffered considerably from drought, stagnant water from the deeper pools of rivers being their chief source of supply.

These natural reservoirs become easily contaminated, with the result that Dysentery, Diarrhœa, and other water-borne diseases were prevalent, more especially amongst the younger children.

(b) Nil.

(c) The cesspool system still prevails, and the bucket system to a lesser extent, as previously reported.

(d) Nil, except in some of the locations where overcrowding was evident during the Small-pox epidemic referred to fully in my last report.

(e) All are well kept, but are not subjected to any regular official visitation, nor do I consider such necessary with so limited a population.

(f) No remarks.

(g) As previously reported.

(h) The Native Locations extend over the greater portion of the entire district. They are, generally speaking, not densely inhabited, and are under supervision now of only one Native Inspector, a European. The Headmen and Sub-Headmen are placed in authority to report upon matters generally. They are extremely loath to report upon matters touching disease, or upon those relative to the public health, and share with their fellow-natives the dread of quarantine and isolation in cases of infectious and contagious disease.

But I do not see how this matter can be altered, as long as the existing circumstances remain. Cleanliness of dwellings is not so generally absent as one might suppose, many of the huts being well looked after and tidily kept. The rules of sanitation are elementary in the extreme. Dogs and pigs are the chief scavengers.

(i) As reported already.

(k) No remarks.

(l) None whatever. The absence of any form of Hospital accommodation is a great trial to the medical men of the district, but more so to the public generally, who, however, take no steps to encourage the promotion of a Hospital scheme.

(m) No Small-pox and very few cases of Enteric occurred, none of which were fatal, although two were severe. On 27th May, 1904, an outbreak of Diphtheria occurred on the coast border of the District, on a farm occupied by a European family. All the cases recovered except the first, which was in a hopeless condition when examined. The treatment was by Antitoxin, and the cases were bacteriologically confirmed in diagnosis. In all four European children were attacked. One Native herd boy had the disease, and from him the infection came. The last case was discharged on 23rd June, 1905. There were other cases un- and base my remarks upon rumour only. The entire farm was strictly quarantined.

Measles amongst the Natives made its appearance early in 1904, but I did not come into personal contact with any of the cases. I believe a few deaths did take place.

The Divisional Council control the expenditure and general management of all epidemics which occur in the District.

In 1904 there were 768 vaccinations performed, and in 1905, 2,319. About 80 per cent. I estimate as successful under the heading "Primary," and 60 per cent. under that of "Secondary."

Rodents, more especially mice, are very prevalent both in the dwellings and in out-buildings of farms. Nothing is done towards their extermination.

No cases of suspected Plague have occurred in the district.

56. PHILIPSTOWN.

(i) PHILIPSTOWN.

DR. WM. JOHNSON CALDER, ACTING DISTRICT SURGEON.

During the periods under review the District Surgeon, for whom I am now acting, was in charge of the District. I therefore wish it to be distinctly understood that all the information contained in the following health report has been procured by me from the records at the Government and Municipal Officer at Philipstown, and from their respective officers, supported as far as possible by per-

sonal observation and knowledge during my tenure of office from the 1st of January, 1906, up till the date of this report.

The year 1904 was characterised by more deaths from Gastro Enteritis, Pertussis, Influenza, Enteric Fever, and Diphtheria than occurred in the year 1905, which distinctly points to epidemic influences.

(a) The water-supply remained in the same unsatisfactory condition until in November, 1905, when the Municipality succeeded in drilling two holes of about 60 feet deep on the bank of the old river bed, in both of which a very good supply of water has been obtained, but it is a significant fact that although those holes were opened and water struck, it was not until after I had reported to the Resident Magistrate on the 11th January, 1906, that the water-supply to the Coloured inhabitants was positively injurious and the primary cause of infection in the town, that a pump was erected in one of the holes and water supplied from it to the public. The Town Clerk makes me to understand that the old polluted holes in the bed of the river, of which I had complained to the Resident Magistrate, and from which the people in general got their water-supply, have been permanently closed. I regret, however, to say that the poor whites, and most of the coloured population, are still taking the water from these polluted holes and making use of it for domestic purposes. It is highly essential that stringent measures should be adopted in effectually obliterating such a nuisance, and I should recommend as a permanent remedial measure the filling in of all stagnant pools with a trench cut in the bed of the river in order to keep drained off the surplus water from them.

I observe that since my letter of report to the Resident Magistrate, already referred to, that the Municipal Authorities have commenced the construction of a reservoir in front of the gaol, on top of the hill overlooking the town. As far as the site goes, it is an exceedingly good one, and the capacity of the reservoir appears sufficient, as I understand from the Town Clerk that it is to be 8 feet deep, 92 feet long, and 24 feet wide, partly sunk into shale and partly built above ground, and covered with galvanized iron. It is proposed by the Municipality to erect pumping gear at the two bore-holes of sufficient strength to fill this reservoir whenever it is necessary to do so. The Municipality, however, have made no provision for the construction of a filter-bed in the floor of the reservoir, which to my mind is an error of judgment on their part, seeing the vast amount of insectivorous matter that must be provided against in the pollution of water in this country. I should strongly recommend, which I pointed out to the Town Clerk when he inspected the site with me, that the reservoir be fitted with a filter-bed even if it be one constructed of coarse and fine river pebbles with common stone receiving-boxes into which the delivery pipes should be placed.

(b) No sewerage or drainage system exists in this town.

(c) The collection and disposal of night-soil, slop-water and household and other refuse.

The Town Clerk writes me as follows:—"No system for slop-water introduced yet, but arrangements have been made with the contractor of night-soil to remove slopwater also, when householders desire it and pay an extra fee to be agreed between householder and contractor."

It is a remarkable coincidence that the Municipality should separate the responsibility of the removal of these offensive products into two, and to make themselves responsible to the householder for the removal of the less injurious ones, leaving the dangerous ones to be decided on a contract made between a private person as contractor and the householder himself. I deprecate such a very bad system, and in proof of how dangerous it is to the public health of the town, I may mention that it has been brought to my attention that when the contractor of night-soil makes his periodical visits for products, if the householder should unfortunately not be ready with one shilling to pay the contractor to remove the bucket with the night-soil, it is left until the shilling is forthcoming, and I am also informed that if the householder procure the shilling and requires the contractor to return the day after the appointed day, to remove the bucket, he will not do so, and not until the next recognised period of removal comes round. In the interim the buckets overflow and health is imperilled. The Municipality should undertake the entire work of removal of all products and collect their own fees, thus abolishing all private contracts in such vital matters of the kind.

Many of the places of business and residences are kept, and have been kept, in a very filthy state. In dealing with such matters as a remedial measure, I should suggest the appointment of an Inspector of Nuisances directly under the supervision of the District Surgeon who should be salaried for his services as Health Officer.

(d) There is overcrowding in the location in seven houses, which I have brought to the notice of the Municipality, and have requested that it should be remedied without delay.

With respect to the Municipal Building Regulations, I find that the new regulations have not been approved of or sanctioned yet, and that the old regulations are still in force. As far as these old regulations go, I consider them wholly inadequate, and the sooner the new regulations are sanctioned the better for the health of the community.

(e) The slaughter-house, bakeries, and dairies are in sanitary order, but it is to be regretted that the greater portion of the slaughtering of sheep, goats, etc., is done by the householder in his own private yard, which I condemn. It appears that the farmers have been habitually accustomed, at the time when they make their monthly periodical visits to the town for their devotional exercises, to bring in with them sheep strapped to the back of their carts in order to provide meat for the few days that they are in town; these animals are killed at the private residences and not at the slaughter-house, which is to be deprecated and the Municipality should prohibit. Many of the resident householders stable cows, goats, etc., at their residences, thus creating successive accumulations of droppings that in some of the yards are positively dangerous.

(f) and (g) Nil.

(h) The Native Location is positively in a dangerous condition. There are sixty-nine houses containing 315 persons, seven of which are overcrowded and many of the houses not fit for human beings to live in, being dilapidated and insanitary. The Municipality some time ago erected two latrines, one each for males and females, whilst they had to provide for 315 persons. The Town Clerk informs me that these buckets are emptied twice a week, and the refuse is removed twice a week. The site of the location being an exposed one, there is no possible means for a resident, in case of an urgent natural call, to run to a private spot in the adjoining veldt, whilst the two latrines are in use or overburdened from successive accumulations, and the result has been, which is still in operation, that the people make use of their backyards for natural calls, both inside and outside where human fæces abound. I condemn the Native Location at Philipstown, and pronounce it to be in a very dangerous insanitary condition, requiring immediate and proper professional supervision. I recommend that not only should there be cleaning up started, but that two latrine sheds to contain ten buckets each, one for male and one for female, to be at once erected, which should be cleaned four times a week at least.

(l) There is no Hospital accommodation of any kind whatsoever in the District.

(m) The deaths that occurred from Enteric Fever and other infectious diseases in the year 1904 and subsequently, appears to me to have been attributable to the bad water-supply and insanitary state of Philipstown, and I am quite convinced that if the Municipality will only adopt a proper system of supervision, with a properly constituted Health Board, from the situation of the town, infectious disorders will be minimised, if not entirely eradicated. With an intimate practical knowledge, extending over a period of twenty-one years in the West Indies, and six years and nine months in the Colonies of South Africa, of the various methods in the administration of sanitary affairs adopted by them, I am of opinion that the constant visitation of infectious disorders, particularly in the Cape Colony, is due to the want of professional supervision in all health matters. There is scarcely a Municipal Council which has not some peculiar little system of its own at work, many of which, unfortunately for the ratepayers, are on the penny wise and pound foolish system, if I may so say.

The Municipalities spend large sums of the ratepayers' money yearly with every good intentions in the preservation of the public health of their towns, but in very many cases the persons to whom are entrusted the public health work, are quite ignorant of even the elementary principles of public health laws, and in consequence of which, when infection suddenly appears in their midst, additional large sums have to be expended in order to repel the invasion, then, of course, with proper professional aid; and it is then only that the Supervisor of Health matters is considered incompetent for the task.

It is perfectly clear to my mind that the only solution to this problem would be the appointment of the District Surgeon at a fixed salary yearly, as Parochial Medical Officer, under a properly constituted Health Board, with Country Members as well as Town Members. The Parochial Medical Officer should have complete control of the public health work to be done, and have the Sanitary Staff under his control as well. He should be obliged to make periodical house-to-house visits of inspection, and a monthly report of the

health of his District. It would be interesting to know what the additional sums paid by the several Country Municipalities to professional gentlemen amount to for the past six years.

The system of paying medical gentlemen 2s. 6d. to report a case of infectious disease is a bad one, and should be abolished. I consider that it should be made compulsory on a medical practitioner to report the case without a fee, and that the fund from which these fees are being paid out of would be put to better use in providing, or assisting to provide, for the yearly salary of the Parochial Medical Officer. I do not believe that if the unworkableness and dangers attending the various systems of the administration of public health matters were clearly put before the ratepayers, that the Municipalities would encounter the slightest difficulty in making provision, by imposing a small rate in each case, for the yearly salary of the Parochial Medical Officer.

(ii) SUB-DISTRICT OF PETRUSVILLE.

DR. D. M. MACIVER, ADDITIONAL DISTRICT SURGEON

In submitting my report for 1904 and 1905 I have to state that although resident here as a private practitioner since the beginning of 1904, I have acted as District Surgeon only from March of the latter year, and that therefore the statistical information is not as complete as it would otherwise have been.

The general health of the Sub-District has been below the normal standard for the last two years. This is in great measure accounted for by the long-continued drought, which has really impoverished many of the population, and has reduced the supply of fresh vegetables, milk, and good butcher meat to a minimum.

(a) The water-supply is permanent and of good quality. It is derived from a spring situated at a higher level on the outskirts of the village. At its source it is protected against impurities by a covering of stone and cement, whence the water runs through a closed iron pipe to a reservoir, from which it is conveyed in two-inch iron pipes to hydrants constructed of iron, erected in different parts of the village. The return flow is made to enter a dam, which is used for irrigation purposes.

(b) There is no system of sewerage or drainage in use.

(c) Night-soil is removed twice a week by the Municipality's cart. The bucket system is in vogue, each householder being required to throw some form of disinfectant regularly into the pails, but as this rule is by no means strictly observed, it would be highly advisable to employ a double set of buckets, and the "returned empties" should be well smeared inside by the Municipality's servants with a reliable though inexpensive deodorant and disinfectant.

Regarding the disposal of night-soil, there are grave objections to the existing arrangements, as at present they constitute a menace to the health of the community. The sterco is deposited on the open veld, only about 500 yards outside the village and close to the Native Location. In rainy weather much of this faecal material is carried still nearer the township, while the wind blows offensive rags and papers broadcast—with obviously dangerous results. In hot, dry weather again the air becomes laden with particles of desiccated excreta, which are wafted about the village, lowering the vitality of the inhabitants and spreading infection and disease. I would strongly urge that a deep trench be dug about a mile from the nearest dwelling-house, and that the excrement be deposited therein and covered with dry earth from time to time.

Slop-water is disposed of anywhere in the backyards or gardens, causing in many instances a horrible stench. The Council's regulations to carry out its removal at regular intervals, are not observed.

Household refuse is removed bi-weekly and deposited on the Commonage near the town. It might be burned with advantage.

(d) There is very little overcrowding amongst the whites in the village, but in the "red block" of houses occupied by Natives there is abundant evidence of overcrowding, as also at the location, a fact which must be held responsible for the prevalence of Tuberculosis amongst the coloured population. This evil ought to be suppressed without delay, as the aforementioned disease threatens to become a scourge.

(e) The three butcheries and two bakeries are kept fairly clean, but the communication of a bedroom with one of the former is open to serious objection. There is no proper slaughter-house; animals are slaughtered outside the village as a rule, and the carcasses brought to the back of the butchers' premises, to be skinned and otherwise prepared for sale. This matter requires remedying forthwith, there being little doubt that the offal is not always satisfactorily disposed of.

(f) Nothing to complain of under this heading.

(g) No pigs and no sheep or goat kraals are permitted within the township. Stables and kraals for other purposes are kept in a fair state of cleanliness, and are regularly inspected by the Sanitary Officer.

(h) The Native Location might be kept in a more sanitary condition than at present. Deposits of old tins, paper and rubbish are too much in evidence, and the presence of human excrement in the neighbourhood is nothing short of a disgrace. Natives are warned by the Municipal Constable to defæcate beyond a given boundary-line, but it implies too much reliance on their innate goodness to expect them to comply with these orders. The erection of two latrines under the control of the Municipality would be highly desirable.

The twig and sail huts described in a former report by the late Additional District Surgeon constitute the sole form of dwellings, and are undoubtedly a source of disseminating tubercular disease.

(i) The cemetery and Native burial-ground are kept in good order. The recent action of the Municipality in granting water-supply for trees planted round the former is to be commended.

(k) As regards nuisances generally there is at least one urgently requiring abatement. It relates to the sluit running close to the eastern border of the village. In dry weather this sluit contains pools of putrid stagnant water, which is in itself a danger to the public health by polluting the atmosphere, and, further, the washing of clothes is done there with obviously baneful results.

Formerly this furrow used to be flushed out at intervals with water from the fountain, which ensured its being kept in a "sweet" condition, but the great scarcity of water does not allow of this being done at present. I must also point out that Natives and others are guilty of a filthy practice, evidenced by the presence of stercus, in the sluit, and this holds equally true of a kopje in the immediate vicinity. The only way to remedy this is to have at least two latrines built at a convenient spot outside the village, mainly for the use of Native servants who are the worst offenders.

(l) There is no Contagious Diseases Hospital. The old Lock-up, consisting of four apartments, the property of the Municipality, is occasionally used for the isolation and treatment of Natives suffering from infectious disease.

(m) There occurred in 1904 two cases of Puerperal Fever, both being Natives. Want of cleanliness and proper antiseptic precautions on the part of the attendant was probably the cause. Both cases ended fatally. In 1905 there occurred one case of this disease—a Native who recovered. The bedding, etc., belonging to all three was destroyed by burning.

In March, April and June, 1904, seven cases of Enteric Fever were reported, all coloured, with one exception, while in May, 1905, there occurred three cases of Enteric Fever, all Europeans. Both these outbreaks were preceded by widely spread epidemics of Dysenteric Diarrhœa. At the close of last year there were one or two cases which showed suspicious signs of Typhoid, but these cannot be treated of here as they can only be properly discussed in next year's report. Undoubtedly many cases of Enteric Fever occur which are not reported in the village, firstly because a fair percentage of them are never treated by a medical man, and secondly, from the fact that many cases of this disease are so masked or modified in their clinical aspects that accurate diagnosis is to say the least of it, difficult. With the existing insanitary conditions above referred to, the prevalence of Enteric is not to be wondered at.

From June to September, 1904, there was a widespread epidemic of Mumps, and a surprisingly large number of adults were affected.

In August, 1905, there occurred one case of Diphtheria. Antitoxin was used for the patient, and as a preventative measure for all contacts who were isolated. The origin of the infection has not been ascertained. No further cases appeared until the following October when three children contracted the disease in rapid succession. Every precaution was adopted, and the outbreak was nipped in the bud. All four cases were European children.

Recently I discovered a cat suffering from obstructed breathing and a bloody discharge from the nose. Needless to say it was instantly destroyed on the assumption that it had Diphtheria.

A vaccination tour was undertaken towards the end of 1904 by the late Additional District Surgeon. In the village 195 persons were vaccinated, and at outlying centres the number vaccinated was 124. Practically all were believed to be successful. I am confident there are great numbers of unvaccinated people, both in village and district. I consider public vaccination should be performed annually.

57. PIQUETBERG.

(i) PIQUETBERG.

DR. FRED. H. DOMMISSE, DISTRICT SURGEON.

General.—The health of the village and District has been exceptionally good, the depression in trade did not seem to cause any depression in health. Typhoid Fever was only prevalent on two farms, viz., Droogrijstkloof and Groenfontein, the cause being no doubt contaminated water; otherwise there were only a few odd cases here and there, but nothing to cause alarm.

Pneumonia also showed itself here and there, as also a few cases of Broncho-Pneumonia. There seems to have been an epidemic of Dysentery and Diarrhœa amongst children during the months of September, October and November, and although severe in some cases, did not cause many deaths.

Phthisis.—This disease is showing itself more and more, and at one place, viz., Goedverwacht Mission Station, it is gaining rapid strides. In going through the local register I find that Consumption is responsible, since 1899, for sixty-two deaths out of 200; in 1904 fifteen out of thirty-eight died of Consumption. There are several families at present under my care suffering from Consumption. The great cause of it is “intermarriage.” The missionaries, as far as I understand, do not encourage or allow their people to marry “out of” their station. Overcrowding and the situation of the station have also much to do with it. This is a matter which to my mind should be seen into at once. This station has also supplied Robben Island with most of the lepers from our district, although I am glad to report that, as far as I know, there are no more lepers in our district at the present time.

(a) The water-supply is good and pure, but not sufficient. One spring at the north side of the town should be condemned or cleaned out properly, as night-soil and other refuse are buried immediately above it.

The Municipality are endeavouring to get a loan of £1,000 for improving the storage of water; it is to be hoped that they will be successful, as a good supply of water will make a great difference to the place.

(b) Nil.

(c) These are still being disposed of anywhere and anyhow.

(d) Nil.

(e) Fair.

(f) Nil.

(g) Swine are still allowed to run at random.

(h) The water-supply of the location called “Mooiplaats,” should be put in better order, as there have been several cases this year of Enteric.

(i) Good order.

(k) and (l) Nil.

(ii) SUB-DISTRICT OF PORTERVILLE.

DR. FRANK P. BESTER, ADDITIONAL DISTRICT SURGEON.

Since my last report issued at end of June, 1904, there have not been many changes in the management of matters pertaining to health and sanitation, and my report consequently does not differ much from the old one.

(a) The water-supply of this village is still in the same state. Matters are getting worse every day, and will continue doing so as the village increases in size and population. It is daily becoming more evident that something will have to be done to secure all available water for the village for drinking purposes, and the present Municipality, at one of their recent meetings, passed a vote in favour of a regular water scheme. The laying down of pipes will be the only solution to a problem that has troubled the minds of the City Fathers for many years.

(b) Sewerage, nil. The natural drain of the village is practically all towards the open furrow containing the drinking water of the village. During the winter months all the surface waste matter lying on the different erven is drained into the drinking furrow, with the result that the water is often quite undrinkable.

(c) The removal of night-soil has now been carried on by a contractor for the Municipality for the last eighteen months and, as far as the removal of the buckets go, answers very well. The Municipality however allows the contractor to deposit the night-soil far too near the village. The deposit is supposed to be buried at a

depth not less than four or five feet, and to be treated with disinfectants. There is however a decided smell in that neighbourhood.

Slopwater and household refuse are treated by inhabitants on their own properties and in their own way. Most often the slop-water and household refuse are simply thrown out and left to dry and blow about.

(d) There is no overcrowding here. In the location, which is under the direct supervision of the Municipality, there are several houses unfit for human habitation.

(e) There are two slaughter-houses, *i.e.*, licensed slaughter-houses, in the village. They are both fairly clean and well kept. The slaughtering, however, should be done outside the village. At present the slaughtering is done on the premises, often leaving these places in filthy states. The Municipality allows everybody indiscriminately to slaughter on their premises. This should not be allowed in the interest of the health of the town. A slaughtering booth erected on the Commonage would do away with all complaints.

(f) Nil.

(g) Very few cattle are kept in the village. Usually every household has its cow which is properly housed and looked after.

No pigs are allowed on the premises.

(h) The location is fairly well looked after. At one part of the poorer quarter of the location, however, huts are put up that are not fit for habitation.

(i) The cemeteries are under direct control of the Dutch Reformed Church and are fairly well kept.

(l) There is absolutely no Hospital accommodation, and in urgent cases I have to use one of the cells in the gaol yard as a room. The need for some proper quarter wherein to treat and care for the urgent and destitute cases is very great.

(m) During the year 1905 we had an outbreak of Small-pox in the location. A coloured girl working at Observatory or Mowbray in a house where Small-pox was actually prevalent, was allowed to come down to Porterville to her people. She came down with a second girl who had frequently visited her at her house. The second girl stayed here a few days, went to town, and there developed Small-pox. About the same time a case was discovered here in the location. The Municipality, acting on instructions from the Magistrate, at once asked for a medical man to assist them and act as Medical Officer of Health. I agreed to act, and immediately had the two houses properly enclosed and quarantined. All the suspects were placed in one house and all the actual cases in another. Two Native overseers were kept day and night to prevent any communication with outside. A general vaccination was at once commenced, which was very successful. Six of the cases were vaccinated prior to infection and prior to the disease being actually in evidence. These cases all ran a very mild course, and were marked by the absence of any of the grave constitutional symptoms one generally looks for in Small-pox. There was little or no pitting. One case, vaccinated at the same time as the other, was done after infection had taken place. This case was much more severe and pronounced than the rest. Constitutional symptoms were marked as also the pitting. The general vaccination amongst the Natives in the location was universally successful, and that certainly was the reason why the outbreak was so successfully dealt with. There were no deaths.

The vaccination was as follows:—Number vaccinated, 351; persons over ten, 186; children under ten, 165.

The lymph, which was excellent in quality, was supplied from Grahamstown.

The total cost to the Municipality in connection with the outbreak was about £140.

58. PORT ELIZABETH.

(i) PORT ELIZABETH.

DR. DAVID CHAS. REES, ACTING DISTRICT SURGEON.

The years 1904 and 1905 may be characterised as being an evolutionary period in the history of Port Elizabeth. Past sanitary sins, both of omission and commission, have been to a great extent remedied by the employment of drastic public health measures, mainly by or at the instigation of the Plague Authorities. To-day the mortality and sickness rates have fallen markedly. Infectious diseases, such as Enteric Fever, Diphtheria, etc., which formerly were prevalent, now find it difficult to maintain a foothold; these facts point to improved sanitary control which it is to be hoped will be maintained.

(a) The water-supply is obtained from the Van Staaden's water shed. It is of good quality and well looked after both at its source and distribution. The Palmiet and Bulk Rivers scheme, which is to augment the present supply, has been during the past two years pushed on by the Local Authority, and in December, 1905, the additional water-supply was led into the existing mains. The benefit of the increased supply will not however be felt until the new pipes have been completely laid. Some anxiety was experienced over a short period during the past dry season on account of the shortage of water in the reservoirs.

The present storage capacity is 30 million gallons and the new storing capacity will be 333 million gallons, with a daily outflow of $1\frac{1}{2}$ million gallons. The average consumption of water per head of the population is on the increase. An extension of the pipe main was effected during the past year beyond Humewood to the Fisheries and Shark's River Convict Station. The water-supply of the Municipality of Walmer remains the same and is a tank one; that of the village of Korsten is altogether inadequate, being tank, well, or carted from Port Elizabeth.

(b) Sewerage.—Only a small section of the town has a water-carriage system, namely, the area lying between Military Road and Russell Road and extending up to Park Drive. The Lock Hospital at the extreme North End also has a separate drainage system. The town is fairly well supplied with storm-water catchments and drains. During the past two years the Rudolph Street area at the South End has been brought under operation and will eventually be incorporated with the proposed system of drainage. The new scheme has been held back on account of an inadequate water-supply. A survey has now been made by the Local Authority and expert opinion obtained. I understand that the report from the Consulting Engineer has not yet been furnished. The proposed scheme appears to be practicable but expensive, mainly on account of the nature of the soil, the topographical configuration of the town necessitating many deep levels and on account of the extent of area involved. There is no question from a health point of view a water-carriage system is indispensable.

(c) Night-soil.—There is nothing fresh to report in this connection. The present method of collection is not and never can be satisfactory. The Local Authority, inasmuch as the water-carriage system is likely to be delayed, should make an effort to bring into force a compulsory weekly removal, the cost being borne by a sanitary rate in place of the existing voluntary ticket system which obviously has many disadvantages. For example, if a householder has not the necessary ticket on a certain day, his sanitary tub will not be removed for another week unless he pays two shillings and sixpence for a special removal. Night removal would be preferable, but many of the premises are not adapted for such a system. The stercus depositing sites, namely, Victoria Park, North End Beach, and Cape Road, are on the whole well looked after; some means ought however to be adopted to prevent foul odours emanating from the two last named sites. Night-soil method of disposal at Walmer is a pail system, which works satisfactorily; that of Korsten is most unsatisfactory, the majority of the Natives making use of the veldt.

Slop-water.—No improvement has been effected in the disposal of slop-water with which must be included urine. It is estimated that only about 4 per cent. is removed by the Local Authority, the remainder finds its way into open sluits, gardens, yards and open spaces and lanes, this latter method of disposal unfortunately is the invariable one in the congested insanitary areas at the North End and South End and where it is calculated to do most harm.

Household and Street Refuse.—Street refuse is dealt with more satisfactorily than was formerly the case and generally speaking the streets have a cleanly and tidy appearance. Small householders still grudge the cost of domestic rubbish removals, and tend to harbour it too long, and in improper receptacles, on their premises. The town refuse continues to be employed in the Drift Sands Reclamation scheme, and is removed from five to six miles from the town. This proves to be a satisfactory means of disposal. I have noticed lately that uncovered railway trucks have been reverted to in place of the covered ones. The South End rubbish tip has been removed further from the town, namely, to Humewood Road.

(d) Overcrowding.—This evil is less pronounced than formerly. Some three or four years ago it was notorious and was aggravated by the influx of refugees and also in some measure by the closure of a large number of insanitary hovels by the Plague Authorities. The overcrowding which occurred amongst the coloured population has been reduced by the removal of the Natives beyond the Municipal boundary, namely, to Korsten and New Brighton Location. The Local Authority is in need of more stringent regulations for dealing with insanitary areas and dwellings unfit for habitation.

(e) Slaughter-houses in the District are bad in every respect none of them being structurally satisfactory and they all lack proper water-supply and drainage. They are situated for the most part outside the Municipality, namely, at Korsten and Walmer. Both the Municipalities of Port Elizabeth and Walmer have had under consideration the erection of model abattoirs, the former had a sum of money set apart in their Municipal Loan of 1902 for this purpose, and there seems no good reason why the matter should not be pushed on more rapidly.

Dairies.—The dairy premises on the whole are structurally unsuitable for the purpose, but appear to be kept fairly well under control by the Local Authority. No definite outbreaks of disease have, I believe, been traced to a polluted milk supply.

(f) Sale and Storage of Human Food.—The local Sanitary Department focuses a large amount of attention on this subject—some of the community think they devote too much time to it. A number of prosecutions are constantly being brought home to offenders—chiefly the Chinese and other small shopkeepers. It would have a more salutary effect if certain wholesale dealers who not infrequently sell unsound food to the retailers could be penalised.

(h) Native Locations.—Only one Native Location remains standing within the Municipal boundaries, namely, the Reservoir Location. This continues to be in a most insanitary condition, and tends to harbour undesirable Natives; it should be done away with at all costs. There are also two or three areas in the town which are to all intents and purposes locations, such as Vlei Post and Fraser Street. Beer-drinking and disturbances are common in these places. The Native Location at Walmer is also anything but in a satisfactory condition; the majority of the huts are dilapidated. During the past two years the amended Location Act of 1902 has been rigidly enforced in this district and with good results. Emslie's Location, on the Walmer boundary, has at last been dealt with, and is at the present time undergoing the process of demolition.

(i) Cemeteries and Burial-grounds.—Those at present in use are satisfactory, namely, at the North End and South End, and provide ample room for present needs.

(l) Hospital Accommodation.—No Fever Hospital exists in this District. The Small-pox Lazaretto continues under the control of the Plague Authorities, and the temporary Military Plague Hospital adjoining it has been taken over for Small-pox purposes. It would however prove quite inadequate for dealing with an epidemic of any magnitude, as it could not accommodate more than about twenty patients. When the Lazaretto is handed back to the Local Authority the advisability of converting it into an Infectious Diseases Hospital ought to be seriously considered. It is well situated and well equipped, and in my opinion would meet the needs of the district of Port Elizabeth.

(m) Infectious Diseases.—No epidemic of any magnitude has occurred during the period under review. There has been an entire absence of Small-pox in the District. Plague has been less prevalent and appears to have been now stamped out. Fifty-three human cases occurred in 1904 and twelve in 1905.

Tuberculosis and Typhoid Fever are both still far too prevalent, although the latter disease is diminishing yearly. This is attributable to the general levelling up of the sanitary condition of the district. Infection continues to be due mainly to a re-kindling of the disease in old infected areas and to personal infection. No outbreak of Typhoid Fever has been traced to a polluted milk or water supply. The number of imported cases have diminished; this is due to the smaller number of vessels coming to this port, and also the fact that Uitenhage district deal with their own cases at their new Cottage Hospital.

Tuberculosis.—This continues to give rise to the greatest mortality, particularly in the case of the Coloured and Native population, the disease in these classes being virulent and, generally speaking, rapidly fatal. I have not infrequently seen whole families decimated by it in the course of a few months. The benefits of compulsory notification of the disease do not reach the Natives, as they appear to regard it as incurable and do not call in medical assistance until the patient is about to die. Intestinal and Pulmonary Tuberculosis are common, that of bone and joints comparatively rare.

Measles.—No serious outbreak of this disease has occurred in the District, notwithstanding the fact that an epidemic is due, a sufficiently large susceptible infantile population being available. It is four years since the last serious outbreak occurred. No deaths occurred in 1904, but seventeen occurred in 1905.

Gastro Enteritis.—This disease continues to be prevalent; it shows seasonal and areal preference, and is unquestionably for the most part of a zymotic character,

although a certain number of these cases notified appear to be due to dietetic causes. No less than 116 deaths occurred in 1904 and 114 in 1905.

The Municipality make more serious attempts than formerly to check the spread of infectious diseases, and the bedding and clothing of patients are now systematically disinfected by steam. As has been already stated, however, what is most required is an Infectious Diseases Hospital. The Municipality of Walmer has been remarkably free from infectious diseases, only two cases of Typhoid, one of Plague, and eight cases of Tuberculosis being notified in the two years. The following return shows the number of cases of notifiable diseases occurring in the District for the years 1904-1905:—

DISEASE.	Cases.		Deaths.		Percentage Case Mortality.	
	1904.	1905.	1904.	1905.	1904.	1905.
*Tuberculosis	75	255	162	172	...	67·45
Enteric Fever	160	99	23	12	14·37	12·12
Plague	53	12	24	7	41·51	58·33
Scarlet Fever	41	42	...	...	...	...
Diphtheria	31	5	...	...	...	...
Erysipelas	3	7	1	...	33·33	...
Puerperal Fever ... ..	...	8	...	2	...	25·00
Leprosy	3	6	...	...	...	...

*Notification of this disease first came into force during the year 1904.

(ii) NEW BRIGHTON NATIVE LOCATION.

DR. A. B. SIGISMOND POWELL, RESIDENT MEDICAL OFFICER.

(a) The location continues to be adequately supplied with water from the Van Staaden's Reservoir, the water being conveyed in temporary three-inch pipes.

There is some contamination with a deposit of iron salts, but otherwise the water is good.

(b) There is no sewerage or drainage system. The surface drainage is good owing to the natural fall of the land.

(c) The collection and disposal of night-soil, rubbish, etc., continues to be carried out by contract in a satisfactory manner. A new contract was entered into in 1905, placing these matters on a more permanent basis.

(d) No overcrowding exists in the location, although at one time it was necessary to accommodate the new-comers in tents until a more permanent dwelling could be allotted. This however was only a very temporary measure.

(e) There is no slaughtering done here, all beasts are killed outside the area. Slaughter-house sites have been set aside, but as yet have not been made use of.

The butchers' shops are clean, and the same applies to the bakeries. There are no dairies or trades injurious to health present in the location.

(f) The sale and storage of food in the location are carried out in a satisfactory manner.

(g) No pigs are kept, but several residents possess cattle and horses which wander on the veldt. The former are not always under proper supervision, and I think that in some cases the prevalence of the different forms of worms in the Natives may be attributed to cattle roaming round the dwellings and drinking from water utensils.

(h) The location is clean and orderly.

(i) There is no cemetery or burial-ground.

(k) The abatement of nuisances is carried out by a Sanitary Inspector acting directly under the Resident Medical Officer.

(l) No provision is made for the isolation of infectious disease, with the exception of tents. All cases are notified direct to the Divisional Council in Port Elizabeth, who take whatever steps are necessary.

(m) No cases of Small-pox have occurred during the two years and only one of Enteric. Phthisis Pulmonalis continues to be extremely common among the Natives, but a system of disinfection is now being carried out, by means of which it is hoped that its spread will be minimised.

No cases of Measles have occurred in the location.

59. PORT NOLLOTH.

DR. W. R. GRIFFIN, DISTRICT SURGEON.

(a) to (c) As before.

(d) Some improvement.

(e) to (g) As before.

(h) The condition of the Native Location, the population of which has been increased by the arrival of refugees from German Territory, is worse than ever.

(i) The fallen paling has been replaced by barbed wire.

(k) As before.

(l) None.

(m) There were two cases of Enteric, and thirteen cases of Small-pox during the year 1904. The latter outbreak was confined to the coloured population. The source of infection was undetermined. None of the cases ended fatally. There was an attempt to isolate cases and contacts. Disinfecting operations were carried out under the authority of the Resident Magistrate, and the epidemic terminated.

The Local Authority (*i.e.*, Resident Magistrate), in my opinion did all he was permitted to do, which fell very short of all things necessary or possible for preventing or suppressing such outbreaks.

During 1904, three cases of Erysipelas and four of Chicken-pox were notified, and during 1905, two cases of Erysipelas and one of Puerperal Fever.

60. PRIESKA.

DR. J. S. GIBBONS, DISTRICT SURGEON.

(a) The water supplies are satisfactory as to purity, quantity and distribution in the older parts of the village. Provision, in the near future, will have to be made for the buildings springing up near the railway.

(b) None.

(c) Municipal, and fairly satisfactory.

(d) (e) (f) and (g) Unchanged.

(h) The Native location has been shifted some distance away—a decided improvement.

(l) None.

(m) Notified cases were: Diphtheria, 1; Small-pox, 33; Scarlet Fever, 1; Measles, 11; Typhoid Fever, 5.

During 1904 a solitary case of Diphtheria appeared at the Pont in April, and in May one case of Scarlet Fever in the village. Small-pox was epidemic in the latter part of 1904 and beginning of 1905—appearing at four centres—and brought from the North, the South, the East and West. It was first notified on the 26th August at Stuurmansputs. It would appear, however, that others had had the disease for some weeks previously, and that it had been introduced from Carnarvon. A second case was notified in the village, contracted at Stuurmansputs. Under preventive measures, there was no further spread.

On February 7th, 1905, a case was notified at Uitspanberg, but here again it had been present, unreported, for some weeks. The contagion was introduced by refugees from German South West Africa. From Uitspanberg, the disease was carried to Rass' Dam, on the Carnarvon border, where a number of people contracted it, and thence spread, principally by the instrumentality of a marriage and dance, to Nels Poortje, Granaat Kop, Springbok Poortje, Kaffir Kolk, and Wilgerboom Dam, in Griqualand West, and probably to other places in Carnarvon. Altogether, this outbreak resulted in twenty-three notified cases, and a large number—as many or more—of unnotified ones.

A third outbreak took place near the village in April, 1905, brought from near Griquatown, where it appears to have been imported from German S.W.

Africa. The fourth and last outbreak was in July, 1905, at Prieska's Poort, brought apparently from Vosburg. Each of the two last supplied four notified and some unnotified cases.

The disease was of a mild type, some of the adults, however, suffering severely for a few days. There was but one death, a man debilitated by Diabetes of long standing.

The local authorities, viz., the Divisional Council and the Municipality, acted promptly and with vigour, at once arresting the spread of the disease. The Cape Mounted Police rendered valuable assistance. The country people were eager to assist in arresting the epidemic, especially those in whose families it had not appeared.

A matter for regret in connection with these outbreaks, is the want of official information as to adjacent districts. The only information available was common rumour, and was inexact and very slow.

Measles appeared in the village in October, 1905. Nine cases in four families, and one at Prieska Poort, causing no mortality.

An isolated case of Typhoid Fever, ending in death, occurred in the village in the beginning of December, 1905, and four cases were notified from Marydale in November and December the same year. How they originated is not known.

During 1904, 150 births were registered—72 European, 78 Coloured. The deaths were 72—21 Europeans, 51 Coloured. Of these, 41 appear to have been certified. Pneumonia, as usual, was the principal cause, accounting for 9. There was no epidemic, however. Pertussis caused 7 certified, and an equal number of uncertified deaths, ranging from the end of June to the middle of September. Two deaths were caused by Scurvy, a disease that was very prevalent in the Railway Construction Camps, and caused probably by the extensive use of tinned food. Three deaths were attributed to Syphilis and two to Diarrhœa, and there were two violent deaths.

In 1905, 184 births were recorded—101 European, 83 Coloured. Deaths were 87—36 European, 51 Coloured. Pneumonia, 7; Phthisis, 1; Dysentery, 2; Diarrhœa, 1; Fever continued, 2; Enteric, 1; Scurvy, 1; Small-pox, 1; and 2 from Violence were the more important causes. Thirty-eight of all the deaths appear to have been certified.

The principal changes in the population were the Railway Construction in 1904 and 1905, with large camps of coloured people. These camps were fairly healthy, being frequently shifted. After the opening of the railway there was a considerable increase in the white population of the village.

61. PRINCE ALBERT.

DR. R. STEVENSON, DISTRICT SURGEON.

The health of Prince Albert District during these last two years has been very variable. Despite the severe drought during 1904, there was not much sickness in the district. There was a small epidemic of Measles, but it did not assume any serious proportions. There were also a few cases of Diphtheria scattered about. During the first half of 1905, however, there was a severe epidemic of Enteric Fever in the village. There were fifty-six cases, with eight deaths.

(a) Water still runs in an open furrow as before. Many people now derive their drinking water from wells, the water in which is of excellent quality.

(b) and (c) As before.

(d) No change.

(e) Satisfactory.

(g) The keeping of cattle, swine, and other animals is still unsatisfactory.

(h) Still unsatisfactory.

(i) Satisfactory.

(k) The sanitary state of the village is still unsatisfactory. The streets are badly kept. Refuse is still deposited on the roads too near the village. The inhabitants in the lower part of the village do not get a proper supply of drinking water.

(l) There is no hospital accommodation in the district for the isolation and treatment of cases of infectious disease.

(m) During the year 1904 there were only a few cases of Measles and Diphtheria in the village and district. One case of Diphtheria occurred in the hotel here. The patient, a traveller, came from the Calitzdorp District, where Diph-

theria was epidemic at the time. All necessary steps were taken to prevent the spread of the disease, and no more cases occurred. There was one case of Enteric Fever in the School-house in February. The patient contracted the disease in a neighbouring village, a case having occurred in the house where he was staying. All precautions were taken to prevent the spread of the disease, fortunately with success. There were several cases of Scurvy in the Gaol Hospital.

During the month of January, 1905, Enteric Fever broke out in the village. The first case was reported on January 7th, but the patient, a European, came from an outlying district, and so the source of infection could not be traced. On January 19th, a coloured woman living about the middle ward, was attacked, and from that date onwards, cases occurred in rapid succession until the end of March.

The cases occurred as follows:—

MONTH.	Number of Cases.		
	E.	C.	Total.
January	10	6	16
February	10	9	19
March	5	6	11
April	1	1	2
May	2	1	3
June	0	2	2
July	1	1	2
September	0	1	1
Total	29	27	56

It will be seen that the number of Europeans and Coloured people attacked were about equal. There were eight deaths—three Europeans, and five Coloured. A large percentage of the cases occurred amongst children, and of the fatal cases the three Europeans and one Coloured were adults, the four Coloured were children. The cases occurred all over the village, but chiefly in the middle ward. I attribute the outbreak to polluted drinking water. About the beginning of January, large numbers of caterpillars were observed in the trees along the water furrow, about two miles above the village. These were blown by the wind into the furrow, where they lay dead in thousands in decomposing masses, and I think there is no doubt in that way the water was polluted. In the lower part of the village, where the water is usually the worst, very few cases occurred, the explanation being that the inhabitants in that part obtain their drinking water from wells in the neighbourhood, and not from the water furrow. I consider the Local Authority did everything that was required to arrest the epidemic. The steps taken were as follows: The water furrow was thoroughly cleansed of all decomposing matter, notice was given to the inhabitants not to use the water in the furrow for drinking purposes without its being previously boiled. The native camp was thoroughly cleaned up; disinfectants were supplied gratis to all who could not afford to pay for them. The excreta from all patients suffering from the disease were disinfected and buried.

From the very nature of things the inhabitants of this village will always be liable to such outbreaks. From its source in the mountains the drinking water runs in an open furrow to and through the village. This furrow is not enclosed in any way, consequently animals of all kinds graze on its banks, micturiting and defoecating in the stream. Part of the way the furrow runs alongside and below the level of the road, and so whenever it rains, large quantities of filth-laden matter are washed into it, so that by the time it reaches the main street, it is totally unfit for drinking purposes unless previously boiled. The only remedy is to have the drinking water conveyed to the village in pipes from its source in the mountains, where its purity is certain. The Municipality have at present some such scheme in hand, and it is to be hoped that in future this village will be free from such dreadful epidemics of a disease which is entirely preventable.

There have been several cases of Measles on farms near Fraserburg Road, but no cases occurred in the village during the year.

There have been no cases of Small-pox, and no vaccination tours in the district during the last two years.

There are a good many cases of Phthisis amongst the Coloured people.

There are at present seven paupers receiving relief from Government.

62. QUEENSTOWN.

(i) QUEENSTOWN.

DR. H. BATCHELOR, DISTRICT SURGEON.

(a) to (h) No alteration.

(i) A new cemetery for Natives has been opened, as the last had not sufficient depth of soil.

(k) and (l) No alterations.

(m) The cases notified are as follows:—

1904: Enteric, 8 Natives and 23 Europeans; Scarlet Fever, 1 European; Diphtheria, 8 Europeans; Small-pox, 1 European and 1 Native.

1905: Enteric, 18 Europeans and 1 Native; Scarlet Fever, 4 Europeans; Diphtheria, 8 Europeans and 2 Natives; Small-pox, 2 Natives.

Measles: No case notified, but there were a few cases.

The probable cause of the Enteric cases was water.

(ii) SUB-DISTRICT OF STERKSTROOM.

DR. JOHN MUIR, ADDITIONAL DISTRICT SURGEON.

As I only arrived here in October, 1904, and was appointed District Surgeon in the beginning of 1905, all the data for a complete Health Report for the former year were not obtainable.

(a) The water-supply is obtained from the Hex River from Donkerhoek, from a spring in its bed. The water is led from this to a dam, and thence to furrows running along the streets. Except at its source, it is impure, and liable to pollution. There are also two public bore-holes, one 190 ft. and the other 120 ft. deep, and many private bore-holes and wells. The water from these latter, though brackish, is quite good for drinking purposes. During 1905 the dam above referred to was done away with, and a reservoir dug out and built in, took its place. In addition, several bore-holes were made in the commonage by the Municipality, and from one of these, 150 ft. in depth, a yield of 50,000 gallons in the twenty-four hours is obtained. The Council had passed a resolution to bring this water into town in pipes for drinking purposes, and had arranged a loan for the purpose. The old water supply would then be used for irrigation purposes only. Owing to the resignation of its members *en bloc* for other reasons, the completion of the scheme will be somewhat delayed. In the public bore holes the casing tubes have been brought up to the foundation beam, so that there is no danger of pollution.

(b) There is no system of drainage other than surface, and no sewerage.

(c) The collection and disposal of night-soil are done by a contractor. The holes for the deposit of night-soil are now smaller, and made oftener, and do not constitute a nuisance as formerly. The site is below the town. Ashes, instead of being thrown along the river bank, are mixed with the night-soil. With the exception of the hotels, from which slop-water is carted away regularly, no provision has been made for the disposal of this form of filth. Additional regulations have been introduced, and if approved, will be enforced in future.

(d) There were a few instances of over-crowding, and houses unfit for habitation, but solely among natives.

(e) It has been proposed that the Municipality build more suitable slaughter-houses than at present exist. Funds, however, are insufficient. The existing buildings are fairly suitable.

(f) Nil.

(g) Abuse of the regulations was prevented by the Sanitary Inspector.

(h) There is an improvement in the cleanliness and general sanitation of the location. The Location Inspector and Police make frequent visits. All the above

improvements are due to the Town Clerk, who is a professional engineer, and brings his special knowledge to aid him.

(i) There are four burial grounds; one for Europeans, and two for those of mixed race. The fourth, for Kafirs, is unfenced, and not well laid out. This should be attended to. Kafirs pay no fee whatever. They are all controlled by the Municipality.

(k) Several prosecutions were instituted during the year 1905 at the instance of the Council.

(l) The Small-pox accommodation is unsuitable and inadequate. There are two small houses, seventeen yards apart, one of which has always been used for patients, and the other for contacts. I am now using the one for patients, the other for the nurse, and the contacts are put in a tent a considerable distance away. The disinfection of the latter is more certain, and the quarantine period and expenses much reduced. The lazaretto belongs to the Municipality.

(m) There were many cases of Enteric during the early part of the year 1904 in town and district, which became less when winter set in. During the commencement of the following summer, there was no recrudescence. There were several cases, each of Diphtheria and Scarlet Fever. Whooping Cough and Measles (both rubcola and rubella), and Chicken-pox broke out towards the end of the year.

There was no Bubonic Plague. A rat found dead was forwarded for examination, with a negative result.

There was no Small-pox, and no cases were treated under the Contagious Diseases Act during 1904.

With regard to the year 1905, only three cases of Typhoid occurred, and one case of Diphtheria. Two cases of Small-pox occurred at the farm Bushmans Hoek, the first in a native from Zwartwater, Glen Grey, who had been vaccinated many years previously, and had faint, though visible, marks. The second was infected from the previous case, and was a small unvaccinated baby, under one year. Both recovered. All on the farm and at the neighbouring station of Lower Incline were vaccinated, and no further cases occurred. Treatment lasted from October 20th to November 17th.

A large number of cases of Measles occurred during 1905. Very few deaths have resulted, as the epidemic has not been of a severe nature. The disease is not notifiable here. Whooping Cough has been prevalent and responsible for a few deaths, chiefly in children under one year. 469 vaccinations were done during the year, 333 being primary, and 136 re-vaccinations. While no subsequent inspection was possible in many cases, I have to report that the activity of the lymph supplied was very marked, in great contradistinction to what it was some years ago. I do not think fewer failures could have been recorded from any lymph.

There have been two cases of Scurvy, one case treated under the Contagious Diseases Act. Six *post-mortems* were performed.

Phthisis is becoming very prevalent among natives, and also among Colonial-born whites. Thirteen cases were seen by me during 1905, a large number in a small community.

The mortality for Sterkstroom (including natives) was 35.3 per thousand during 1904, and 34.7 during 1905.

During 1904, 29 European children were born, and 24 natives. During 1905 the figures were 49 and 59 respectively.

(iii) SUB-DISTRICT OF WHITTLESEA.

DR. J. K. MURRAY, ADDITIONAL DISTRICT SURGEON.

During the eighteen months covered by my Report, there has been no considerable outbreak of zymotic disease, except the occurrence of Bubonic Plague at Mousa.

As regards Whittlesea Village:—

(a) The water-supply has been scanty in the dry weather, as the inhabitants are entirely dependent on the Ox Kraal river, which occasionally is nearly stagnant. The river and furrows are still the only available water-supply for those who do not collect rain water.

(b) The drainage of the village is in the same state as in previous years. The Village Management Board has, however, tried to improve the furrows which drain the Queenstown Road.

(c) The public rubbish heap and native latrine has been shifted further along the river bank. This has been done by the Board to secure a less exposed spot;

but as the distance is increased from the residential part of the village, more pollution of both highways and byeways is, I fear, a likely sequence.

(d) There is nothing very glaring under this heading.

(e) In the absence of infectious disease, there is no great risk to the methods of sale of milk or butcher's meat; but periodical inspection by the Board is desirable.

(g) Swine are not allowed in the village. There are one or two transgressors in the village, however, who should be looked to. The cattle-kraals are not exactly ornamental, but hardly amount to a nuisance.

(h) A few huts which constitute the village location are in fairly good order. I can learn of no nuisance.

(i) The cemetery is in good order and well cared for. The native portion is but little used, as the native prefers to be "gathered to his fathers" in the locations around, where they are not invariably provided with cemeteries. As time goes on, notwithstanding the ample space which South Africa affords for both the living and the dead, this custom should be looked into.

(h) There was one case of Small-pox in 1905. The coloured driver of the School Inspector developed the disease here, and was quarantined along with the bastard friend who hired him lodging and food. He was pre-vaccinated, and had modified Small-pox. The contacts of this dwelling-house and the river bank coloured inhabitants were vaccinated. The man probably brought the infection from Glen Grey. The Board acted promptly and efficiently, hence no spread of the disease.

WHITTLESEA FIELD CORNETCY

1904: Population, 802; births, 90; deaths, 42. 1905: Births, 43; deaths, 31.

WHITTLESEA VILLAGE.

1904: Population, 401; births, 27; deaths, 8; deaths under one year, 3. 1905: Population, 401; births, 13; deaths, 6; deaths under one year, 2.

SHILOH.

The health of Shiloh has been good during the period under report. In reviewing the death-rate of Shiloh and similar locations, it should be borne in mind that natives away at service or employed in towns, very often come home to die. This raises the death-rate.

1904: Population, 745; births, 27; deaths, 24; under one year, 4. 1905: Population, 780; births, 37; deaths, 19; under one year, 7.

ENGOTINI.

Engotini, similarly is in fair condition, both as to health and sanitation.

1904: Population, 180; births, 13; deaths, 5; under one year, 1. 1905: Population, 193; births, 10; deaths, 4; under one year, 1.

OX KRAAL AND KAMASTONE LOCATIONS.

There was an outbreak of Bubonic Plague in Mousa, Ox Kraal, on 9th May, 1905. A man, Gunga, by some means or other, left the Lazaretto, East London. He came home to Ox Kraal, sleeping one night at Hackney, and died the next day on reaching his home at Mousa. I was on a public vaccination tour, so Dr. A. E. Thomas, my deputy, made a *post-mortem*, and pronounced the case plague. Specimens which were sent to the Health Department enabled this diagnosis to be confirmed. An area of huts and houses was quarantined, containing twenty-four persons. In all, four developed plague, three of whom died. The clothing and bedding in the Mousa house and in the hut at Hackney, where Gunga slept, were burnt. Both houses were burnt. Afterwards the Resident Magistrate and Assistant Medical Officer of Health for Colony visited Mousa, and the latter opined these measures were rather severe, and disinfection, he considered, might have been substituted. The Health Department pin their faith on what is called the rat theory, which seems very feasible, and has Simpson's approval. If this be so, certainly plague is not likely to spread by means of rodents in an average Native hut or house. Whether it cannot spread rapidly in a little hamlet like Mousa by other means, when one considers the gregarious habits of the natives is, I think,

open to question. Moreover, whether satisfactory disinfection of clothing and bedding, in a house where there has been pneumonic plague, can be effected by spraying and the primitive methods at the disposal of the District Surgeon and Cape Police in a remote hamlet among the hills, is an open question only to be settled by bacteriological tests, and perhaps further development of infection. The Cape Police from the Hackney Camp nursed the cases, at first, in the infected houses, and finally a second-hand field hospital was sent to Mousa for the use of the patients. No plague medical officer was placed at Mousa, and the District Surgeon was instructed to attend to the outbreak. It was a source of great inconvenience to his practice.

Leprosy.—I have not heard of any more cases of Leprosy in Kamastone Location.

Syphilis.—Nothing has been done by the District Surgeon. The Resident Magistrate suggested that the syphilitics should be sent by the Field Cornets and Cape Police to the gaol as a rendezvous on a fixed date in each month. This is a feasible plan. Unless these cases, or suspected cases, are unearthed by Field Cornets, Cape Police, or Headmen, and made aware that treatment can be obtained gratis, no really effective results can be obtained.

Vaccination.—During the last year, I have made two vaccination tours. Lymph, as a rule, has been good whenever I had an opportunity to judge by results. The tours were well organised, and the vaccination cost about 10d. per head. There should be quarterly vaccination at Hackney and Kamastone. There is still a fair proportion of the population requiring vaccination. On the Cathcart border, near Tylden, there were several cases of Small-pox, but the disease never crossed into Queenstown. At the desire of the farmers, I vaccinated a considerable number of their natives on the farms contiguous to the Cathcart border.

Registration of Births and Deaths.—I believe from what I have heard, there is some laxity on farms in carrying out native registrations; but no particular case has come under my cognisance.

Hackney, Cimezile, Mousa, and Mswakazi.—1904: Births, 3 European, 69 Coloured; deaths, 33 Coloured; deaths under one year, 11 Coloured. 1905: Births, 61 Coloured; deaths, 25 Coloured; deaths under one year, 10 Coloured.

Kamastone.—(Village Management Board Area).—1904 and 1905: Births, 116; deaths, 48; deaths under one year, 19.

Rural Area.—1904 and 1905: Births, 45; deaths, 25.

63. RICHMOND.

DR. JOHN H. BAM, DISTRICT SURGEON.

(a) The water-supply comes from both east and west ends of the town.

(1) The east end is the main supply, both for domestic and irrigation purposes. For irrigation purposes it is stored in a dam in the river bed above the town. The dam is supplied by an artesian well, it is allowed to fill every night, and emptied every day. This supply has proved insufficient during the past few months of severe drought. Below this dam there is a well-built spring, from which most of the drinking water for the town is carried in buckets. The spring is constant, strong and sufficient, the water is of excellent quality. I am not aware of any pollution, either at its source or on delivery.

(2) The west end water-supply comes from a reservoir in an open furrow. This water is used for drinking purposes by most of the Coloured families living in that part of the town. This supply is liable to contamination at its source in the reservoir and during its course in the furrow, and is, therefore, absolutely unfit for drinking purposes unless previously boiled. Steps are being taken to remedy this. Two artesian wells have been made from which the west end will be supplied in pipes.

(3) There are two pumps supplying water for domestic purposes. (i) The pump in the Square. (ii) The pump in the Show Yard. These are not liable to pollution.

These are not liable to pollution.

(b) Nil.

(c) The night-soil pails are emptied regularly once every eight days. The returned empty pails are thoroughly disinfected. The pails are emptied one mile towards the south side of the town. This removal is quite sufficient during the winter months, but two removals a week should take place during the summer months.

There is no regular system of removal of slop-water. It is generally thrown into the back yards.

Household and other refuse are disposed of satisfactorily, being removed regularly in carts.

(d) Among the white population the overcrowding is practically nil, but among the Coloured population there is often overcrowding. I am not aware that any steps have been taken to avoid this.

As regards dwellings unfit for human habitation, there are many in the town proper, occupied chiefly by Coloured people.

(e) There are three slaughter-houses and butcheries. These are all well kept. It would be an improvement if a public slaughter-house were erected.

Bakeries and dairies nil.

(f) The sale, storage, and preparation of human food are entirely left to the local store-keepers. Vegetables are brought in fresh from the farms or gardens in the town, and sold on the daily market. The sole manufacture is soda water, for which rain water is used.

(g) In many cases horses are kept in too close proximity to dwelling houses. A few swine are kept in town, these are supposed not to be kept within twenty yards of the dwelling houses. In several cases this regulation is not enforced.

(h) The huts of the Native Location are dilapidated and overcrowded, and too close together. The Location is not laid out in streets, and the huts are built irregularly. The difficulties of keeping the Location clean are therefore greatly increased, and in many respects sanitation is defective.

(i) There are three burial grounds:—

(1) Dutch Reformed; (2) English; (3) Coloured. They are all well kept.

(k) The Local Authorities have done a great deal during the past year to abate nuisances, and there can be no doubt that the general condition of the town has greatly improved.

(l) There is a Hospital about one mile from the town. It is a brick building, consisting of two rooms each 14 by 14 feet, and 14 feet high, ground floors and mud roof. It is in a most dilapidated state, and is under control of the Municipality.

(m) During the past two years the health of the town has been excellent. A very few cases of Enteric Fever and Diphtheria were reported. Two cases of Enteric Fever occurred on farms, the patients contracting the disease in a neighbouring village. Nowhere was Enteric Fever or Diphtheria in epidemic form, nor could any direct cause be found for the cases of Diphtheria. Several cases of Measles have been reported since September, 1905, the first case occurring on the farm Springfontein, the patient contracting the disease at Hanover. Since then twenty-one cases have been reported. In two cases the patients developed Bronchitis. No deaths have occurred. No cases of Small-pox occurred.

64. RIVERSDALE.

DR. J. W. DE VOS, DISTRICT SURGEON.

(a) The water-supply has been very constant during the year, notwithstanding the paucity of rain during the latter part of the year. I have to make the same remark as last year regarding the danger of pollution at the intake of our drinking water, viz., that the open furrow skirts the high road for some distance, and that nothing has been done to remedy this danger. The Local Authority is successfully doing its best to give a more constant supply of drinking water to the inhabitants at the lower portion of the village.

(b) Drains made of cement are regularly flushed and cleaned, but such drains are scarce; the greater part of the village is drained by little furrows dug in soil in which the water-supply soaks away or stagnates. This will ultimately give us a soil saturated with organic matter, a good nidus for any disease-giving organism.

(c) Night-soil is dealt with in a very efficient way; while the carting away of

household and other refuse is not compulsory. I would recommend that this also be made compulsory.

(d) In some houses the Coloured inhabitants still overcrowd. Ventilation in smaller houses is very imperfect, in fact, altogether lacking in most one-roomed houses.

(e) All dairies are registered, a recent institution, and consequently subject to inspection. Other trades are well conducted and supervised.

(f) No remarks.

(g) The keeping of cattle, swine, etc., is well looked after. Swine are not allowed to be kept on small holdings.

(h) No Native Location exists.

(i) New cemeteries have been made on a convenient site, and some old cemeteries have been closed up. The water for irrigation purposes coming into the village is led over the drainage from the new cemeteries in a properly conducted chute.

(k) Nuisances on the whole have abated greatly. The Local Authority has drawn up a number of new sanitary regulations, viz., the water-closets have cement floors, and are closely and constantly inspected by the Sanitary Inspector, as also are yards in general.

(l) A Contagious Diseases Hospital of a kind exists for the use of patients in the Municipality. This Hospital is owned by the Local Authority. Patients from the District are debarred, as the District Council refused to pay anything towards the founding of the Hospital.

(m) Cases of Enteric which occurred during 1905 were a continuation of the epidemic occurring in 1904. This epidemic, and our efforts to exterminate it, has been fully reported on. The town and District have been quite free since. The pamphlets distributed by Government have done a great deal of good in educating the ignorant section of the inhabitants and teaching them how to avoid the disease. The railway camps, also often a source of infection, have been removed since.

One or two isolated cases of Diphtheria have occurred.

Measles did not visit us during the period under report.

65. ROBERTSON.

DR. LEWIS W. STEVENS, DISTRICT SURGEON.

(a) I entered fully into the water-supply of the urban centres, viz., Robertson and Lady Grey, in my annual report for 1902, since which time no alterations of any importance have taken place.

(b) See Annual Report for 1903.

(c) The frequent collection and disposal of night-soil are fairly efficiently carried out under the immediate management and control of the Local Authority, independent of the will or the whim of the householder. At Lady Grey the disposal of night-soil is less efficiently carried out.

No system whatever exists in Robertson or Lady Grey for dealing with household refuse and slop-water, which gives rise to obvious discomfort; this together with filthy pig-styes in every direction within the limits of the villages, constitute serious sanitary defects.

(d) Overcrowding in badly ventilated dwellings which are often unfit for human habitation, is the rule, and, in my opinion, it is answerable for the seriously increasing prevalence of disease, especially Tuberculosis, among the Coloured population. (*Vide* deaths from Phthisis for 1903 and 1904.)

This question merits careful consideration. The Local Authorities, however, do not exercise their powers with regard to this matter, thinking perhaps as many do that any shelter is good enough for Coloured people, forgetful of the fact that the mortality from this infective disease is increasing among the European population. It is reasonable to believe that with better and more hygienic house accommodation the mortality from infective diseases could be diminished.

(e), (g), (h), and (i) See report for 1903.

(f) No complaints regarding the sale, storage, and preparation of human food having been made, no searching enquiry with regard thereto has been instituted by the Local Authorities.

(g) Pig-keeping is allowed in the towns in such a way as to be an abominable nuisance, chiefly owing to the sour stinking food on which they are commonly fed,

and in consequence of the atrocious smell of their excreta, greatly increased by being unremoved for long periods. I suggest that no pigs be kept in the village.

(k) The pollution of the water-supply above the in-take in De Hoop is the principal sanitary defect that exists.

Since the passing of the Act authorising the laying of the water-pipes, the proprietors of the farm De Hoop have taken out a new furrow higher up the river, and have brought ground above the in-take under irrigation. An interdict should be obtained to prevent this pollution.

There is, however, another defect which calls for special attention. There is great fear lest the discharge of many tons of refuse, from a distillery in this town, to open pits in too close proximity to the lower part of the village is calculated to menace the health and lives of the inhabitants.

(l) There are no Hospitals for infectious diseases.

(m) Towards the end of 1904 and in the beginning of 1905, eight cases of Typhoid Fever occurred along the banks of the Klaas Voogds River, with two deaths, one European and one Kaffir. This outbreak could be traced to the use of polluted water.

The first case which occurred had contracted the disease when visiting Barrydale, after which he returned to his home high up in the Klaas Voogds River Valley, and the disease gradually extended from farm to farm down along its banks. The disease subsided with the on-come of the rainy season. No case of Measles has occurred in the District since 1903.

A Small-pox case, that of a Coloured female, was discovered at Lady Grey on the 13th May, 1904, ten days after the on-set of the eruption, and was discharged on the 8th of June, this woman had been successfully vaccinated in childhood. The cause of infection was unknown. On its discovery all steps possible were taken to prevent the spread of the disease, viz., strict isolation of patient and contacts, with vaccination and revaccination generally, etc., etc. Most successful vaccination in previous years has been performed in this locality, and this in a large measure accounts for there being no spread of the disease.

There has been a remarkable absence of contagious diseases in this District during 1904 and 1905.

Vaccination throughout the District has been regularly performed. The attendance, however, was not as large as it should have been at all the stations. The lymph was uniformly good, and the results were generally successful.

Population of District (Census 1904). Urban, 4,340; Rural, 5,531.

Births.	European.		Coloured.	
	1904.	1905.	1904.	1905.
Male	101	91	98	120
Female... ..	89	82	111	105
	—	—	—	—
	190	173	209	225
	—	—	—	—
Total Births	1904.		1905.	
	399.		398	
Deaths.	European.		Coloured.	
	1904.	1905.	1904.	1905.
Male... ..	31	18	81	73
Female... ..	28	28	69	76
	—	—	—	—
	59	46	150	149
	—	—	—	—
Total Deaths... ..	1904.		1905.	
	209.		195.	

Main causes of death:—

1904: Typhoid, 6; Diarrhoea, 15; Diphtheria, 2; Pneumonia, 12; Bronchitis, 11; Phthisis, 28.

1905: Typhoid, 2; Diarrhoea, 22; Diphtheria, 3; Pneumonia, 31; Bronchitis, 3; Phthisis, 20.

Diseases notified:—

Urban: 1904, Typhoid, 6; Diphtheria, 6. 1905, Typhoid, 1; Diphtheria, 6.

Rural: 1904, Typhoid, Vrolykheid, 3; Wolve Kloof, 1; Klaasvoogds River, 5; Karpad, 1.

Rural: 1905, Typhoid, Klaasvoogds River, 3; Karpad, 1.

66. SIMON'S TOWN.

DR. W. CLARKE, DISTRICT SURGEON.

During the years 1904 and 1905 the general health of this District was on the whole satisfactory and a great deal of useful work was done by the Local Authorities in improving sanitation. At Kalk Bay and Muizenberg extensive and costly drainage and electric lighting works have been undertaken, and those places have now a good supply of pure water.

No epidemic of any importance took place within the District, but there was a slight outbreak of Small-pox in 1905 within the Kalk Bay Municipal area, which was promptly and successfully dealt with by the Local Authority there. At Noord Hoek in August, 1904, a coloured man, who had just returned from the Paarl, showed signs of the same disease and the case was reported by the Field-cornet to the Resident Magistrate, who at once sent me out to deal with the outbreak, when I vaccinated all contacts. Subsequently the Divisional Council having been communicated with, the man was removed to the Isolation Hospital, Cape Town. This patient lived in a large house, and I traced seventeen children and nine adults, a total of twenty-six persons, as having been in contact with him, of whom but three had previously been vaccinated. Of those persons only three adult males who had been closely in contact with the patient (having smoked out the same pipe), developed the disease, but in a very mild form. I think it cannot be doubted prompt and efficient vaccination limited the disease in this instance.

Enteric Fever, formerly very common in Simon's Town before the improvement of water-supply and drainage, crops up occasionally towards the end of the summer months, when the drains become dry. Some cases, of course, are brought into the town from without, and considering the cosmopolitan section of the community employed at the Dock Extension Works and their habits, I do not think Simon's Town will be free from it for some time to come. The following infectious diseases were notified to the Municipal Council during the two years:—Typhoid Fever, 16 (three from H.M. Ships); Phthisis, 7; Diphtheria, 1; Puerperal Fever, 1; Scarlet Fever, 2; Total, 27.

(a) Water-supply remains the same as in 1903. The supply is pure, being chiefly derived from springs on the mountain side, and is sufficient during the winter months, but quite inadequate during the summer. The Municipal Council are considering a scheme of augmenting the supply.

(b) Sewerage and Drainage.—Satisfactory, though during the summer months owing to scarcity of water and absence of rain the drains are not efficiently flushed. I likewise cannot help thinking indifferent plumbing, allowing escape of sewer gas into and in the neighbourhood of houses, may be the cause of some of the cases of disease, particularly Enteric. Nearly the whole town is now drained by pipe drains all laid within the past few years. The Municipal Council last year laid about 5,000 feet of nine and six-inch earthenware drains at Seaforth and the Station outfall. A three-inch water main was also laid along the Waterfall Road for the purpose of connecting the lower portion of the Kloof area with the Victoria Reservoir.

(c) Night-soil is collected by a Municipal service and deposited in the sea. As the extension of a system of pipe drainage proceeds the number of sanitary tubs diminishes, so there are now not many in use in the town. Household and other refuse are collected by the Municipal carts and burnt. Slop-water is either carried away to surface drains or sewer pipes.

(d) The Simon's Town Municipality has compelled owners of tenement houses to put them in proper order, to improve ventilation, construct drains, and connect with sewers, and erect properly equipped water-closets. Overcrowding exists to some extent, but it is an evil almost impossible to entirely prevent. As far as I am aware there are no inhabited houses unfit for human habitation.

(e) Little slaughtering is done now, but the slaughter-houses are kept clean. Other trades are carried on in a satisfactory manner.

(f) The sale, storage, and preparation of human food are watched by the Municipal Sanitary Inspector, and are on the whole satisfactory.

(g) Few cattle are kept and no swine.

(h) The Native Location has about 240 inhabitants. It is kept fairly clean, and is under the control of the Municipal Council, and is superintended by a Headman paid by that body.

(i) Cemeteries are in good order and well kept.

(k) The Abatement of Nuisances generally.—On the whole nuisances are well looked after and immediate steps taken by the Council on receiving reports. A town like this, however, requires constant inspection by the Sanitary Inspector, and

he should devote all his time to his legitimate duties instead of being partly employed on clerical work in the Municipal Office.

(*l*) The Municipal Council contributes towards the Cape Town Small-pox Hospital.

I regret the Municipal Council have not adopted my suggestion made some time ago when acting as their Medical Officer of Health to discontinue watering the streets with sea-water taken from within a few yards of the outlet of one of the largest sewers and quite close to the Town Pier. I look upon the use of such sewage polluted water as a danger to the public health.

67. SOMERSET EAST.

(*i*) SOMERSET EAST.

DR. WILLIAM SCOT, ACTING DISTRICT SURGEON.

(*a*) The water-supply is as before reported, and details will be found in the Mayor's Municipal Report. I quote therefrom the statement that with regard to water we await the loan, and with regard to sanitation the putting in force of the Health Act.

(*b*) Sewerage and drainage as before.

(*c*) There is nothing new to report, except that night-soil is removed by the Municipal Council once a week at expense of rates.

Depositing sites are appointed for the disposal of slops and other refuse.

(*d*) and (*e*) As before.

(*f*) A cold storage was in 1904 instituted by private enterprise.

(*g*) to (*k*) As before.

(*l*) No Hospital accommodation is provided. A Cottage Hospital is contemplated.

(*m*) There was no outbreak of infectious disease during the years 1904 and 1905. A few cases of Enteric Fever occurred.

(*ii*) SUB-DISTRICT OF PEARSTON.

(*ii*) DR. P. T. CAIRNS, ADDITIONAL DISTRICT SURGEON.

(*a*), (*b*), and (*c*) As in former report.

(*d*) Now and again one finds cases of overcrowding amongst the white population. They are the exception rather than the rule. The reverse must be said of the huts of Natives and coloured people. Here and there one finds a clean well-ventilated hut, but they are very few. The majority have neither fireplace nor window, and if a window has been provided it is carefully blocked up.

(*e*), (*f*) and (*g*) These call for no comment except perhaps the fact that slaughtering is done in town. The new Municipal regulations now being submitted for approval will remedy that I hope.

(*h*) The sanitary condition of the location is far from satisfactory.

Human excreta, slop-water, bones and rubbish generally, all seem to be deposited round the various huts. A public latrine should be provided and a stricter watch kept by the Location Inspector.

A considerable number of Natives and Coloured people live in the village, particularly at the north-west end. The remarks *re* the location apply equally to these huts. It is to be hoped that the Local Authority will pay more attention to the cleanliness of that part of the village than has hitherto been done.

(*i*) There are two cemeteries, one for whites and another for coloured people and Natives. The condition of the first calls for mention. To say that it offends public decency is to put it mildly. The majority of the graves are simply riddled with rat-holes, and almost any evening numerous rodents may be seen in the graveyard. On occasion a rather unpleasant odour may be perceived. So far I have been unable to ascertain who is responsible for the graveyard. At present there is no Committee of Management, and no one seems to have any authority in the matter.

(*k*) No change since last report.

(*l*) There is no Hospital accommodation in the District.

(m) During the eleven months I have been here, the village and District have been fairly free from serious disease. The same applies to the period from June to December, 1904.

I notified two cases of Small-pox, one a Native adult female pre-vaccinated on the farm Shirlands, eighteen miles away, the other an unvaccinated infant Hot-tentot in the location. The latter patient came into town from a farm with the rash developed.

The source of infection was not discoverable in either case. Both cases recovered and no other case occurred.

Four cases of Enteric Fever have occurred, all in the district, two were white and two Natives. All recovered.

There have been several cases of Sepsis in the Puerperium in cases attended by midwives, coloured and white. One case proved fatal.

When one sees the filthy person and habits of these midwives, one is not surprised that Puerperal Septicæmia occurs.

There are eight patients on the Contagious Diseases Register, but that number is only a small percentage of the actual number of cases of Syphilis in the District. I think it would be well if all employers of Native labour had their servants examined periodically. I believe this would limit the disease and at the same time would lessen the risk of infection of the employer and his family.

Two cases of Anæsthetic Leprosy, both Natives, were notified, and the patients were removed to Robben Island.

Till the end of December, 1905, no case of Measles occurred in the District. There has been no public vaccination done with the exception of contacts in the two cases of Small-pox. In view of the very large number of unvaccinated children a vaccination tour is desirable.

Rodents are somewhat prevalent, but no special steps have been taken to destroy them.

68. STELLENBOSCH.

(i) STELLENBOSCH.

DR. J. H. NEETHLING, DISTRICT SURGEON.

During the period under report the general health of the District and town has been excellent. With the exception of Measles there has been no epidemic of any sort. There have been several outbreaks of Small-pox, but it was always possible to strictly limit these. There has been no epidemic of Typhoid Fever since 1898. Most of the cases to be tabulated below have been introduced, others notified as Typhoid were not closely investigated.

Tuberculosis, however, though almost limited to the Coloured community is making serious increase. This is a matter in which the co-operation of the whole of South Africa will be required in order to successfully eradicate this insidious disease.

The Municipal Board are fully alive to the necessity of making the town above all a healthy one. They are gradually and steadily improving the place. There are however such matters such as the water scheme, which has been under consideration for so many years and the proper drainage of the various properties which require somewhat more energy and haste than have been put into them thus far.

The farmers are fully alive as to necessity of cleanliness, for their own sakes. Water in the District is fairly plentiful. These facts account for the good health of the District and town in general. There are however several centres, such as Kuil's River, Faure Siding, and other communities, composed mostly of coloured people, which require closer attention on the part of the authorities than has yet been given them. The Divisional Council should moreover have the power to make property owners provide and see after the proper housing of their work-people.

The Municipality has lately extended its boundaries. This will bring such insanitary localities, as those surrounding the Railway Station, under more direct control. These will also have an improved water-supply and consequently less excuse for dirt.

(a) I have in several of my former reports gone fully into the matter of the water-supply. There has been no change effected, except various extensions such as to the newer properties on the Evergreen Estate and those further north, and to the Railway Station.

In regard to this matter I wish again to draw attention to the great need for action in the matter for an improved water-supply. In my opinion the Eerste River has never yet been contaminated with Typhoid, but that does not take away from the possibility of such contamination happening and the very serious results which would ensue.

I have noticed that ever since the trout has been introduced into the river the water in summer is ever so much cleaner and the frogs less.

(b) The streets of Stellenbosch are lined on either sides by a furrow. These in olden days were simply cobbled or lined with round stones. The Municipal Authorities have wisely allowed themselves to be persuaded of the necessity of changing the old order. Most of the furrows have already been replaced by neatly made water-courses, lined with cement or hard bricks and cement. This work is steadily being pushed forward. These furrows act as open drains for the rain, slop, and other refuse water. They act admirably in practice. Unfortunately there are several localities where the backyards are too low to allow of complete drainage into these furrows. The flushing is easily and efficiently effected so that all the dirty water is carried away. There are still several marshy and low-lying localities in the Municipal area, which are improperly drained. These with the low backyards where washing is still done, account for practically all the Diphtheria cases. The advantage of a proper underground scheme would be more sentimental and æsthetic than really beneficial, as I do not think that an open drainage system, such as the present one could be made to be, could be improved upon. I wish again to draw attention to the great necessity of closer attention being paid to such villages as there are in this District, especially in the matter of drainage and sewerage.

These outside the Municipality are nil.

(c) The collection and disposal of night-soil, etc., are still as described in my former reports. The practical results are excellent. To my mind, notwithstanding the nasal objections of the finely organed, it would be a pity to change the present service. There is much room for improvement and cleanliness. But that is the fault of the service and not of the system. For a few minutes after eleven p.m. one is strongly reminded of Cologne, but that is the extent of the nuisance. There has practically been no Typhoid since the service has been introduced. Most of the cases notified have been introduced from elsewhere. The Municipal Authorities should be reminded that these epidemics are directly or indirectly very expensive, and that it would serve them well to expend some of this money saved in perfecting the present system. There is too much of the commercial element involved, estimating the value of any service or system only by its immediate returns.

(d) In the Municipal area there is practically no overcrowding. Several insanitary suburbs have now been included in the Municipality, and will consequently be more directly under control. Another of the dirty and unsightly slums along one of the main streets has disappeared, and been replaced by a row of neat cottages for Europeans. Gradually these Municipal sores are being pushed out, or at any rate out of sight, and the town made more pleasant to reside in. The same cannot be said of the District. The communal farms are increasing and several communities composed mainly of coloured people are springing up in the District. It is to be feared that these are not receiving the necessary care and supervision.

(e) Slaughter-houses are not allowed within the Municipality. They are however liable to inspection.

The butcheries and bakeries have been much improved, mainly owing to stringent inspection and the successful prosecution at the Police Office for any contravention of Municipal rules.

Premises, where unsuitable, have been closed and business not allowed until they were changed to the satisfaction of the Board. The inspection of these is satisfactory.

I do not know of any properly constructed dairy. Anybody may keep a cow and sell milk. With the exception of dairies, I can report great progress in the matters under consideration.

(f) In the better class stores, groceries, etc., matters are all right. It is, when one comes to the smaller shops, kept by Coolies and coloured people, that things are not bright.

The Inspectors of the Board are however fully alive to the seriousness of the matter. Several convictions have been obtained and it will be a difficult matter for offenders to escape detection in future. Excellent aid has been rendered by the Resident Magistrate to the Inspectors and the Medical Officer of Health, especially in this matter. The habits of these foreigners are so inveterate however that it will be difficult altogether to prevent contamination of foodstuffs.

(g) Cattle of various sorts are allowed to be kept by anyone. So far they have, except for the occasional blocking the streets, proved neither a nuisance or source of danger.

Swine are not allowed except under certain restrictions. I am afraid, however, that the regulations are evaded in many instances. Other animals, such as dogs, fowls, etc., are largely kept, but cause no inconvenience.

(h) There are no locations or Native camps.

(i) My official capacity, both as Medical Officer of Health and District Surgeon, has not been properly recognised in the matter of cemeteries and burial-grounds as far as those of the Municipality are concerned. All I can report in the matter is that they are, in my opinion, not established on a satisfactory basis.

The new cemeteries granted to Kuil's River and other places where I have been sent to report are all satisfactory both with regard to size, soil and locality.

(k) The greatest nuisance, except such as may have been indicated under the various headings, is the loafing of people at the corners of the streets.

(l) There is no permanent Hospital accommodation for infectious diseases. The Board of Management of the Victoria Memorial Hospital is considering the matter of providing accommodation for such diseases as Typhoid, Scarlatina, Diphtheria and Measles. Want of funds is the greatest drawback. For Small-pox, isolation tents have always been provided and have proved most satisfactory.

I intend to try and bring about an arrangement between the various boarding establishments and the Hospital Committee for provision against any serious outbreak of the abovementioned diseases which may occur amongst the student community. I wish to draw attention to the fact that there is no accommodation provided for specific cases, and to the urgent need for such accommodation.

(m) During the two years under consideration there have been several outbreaks of Small-pox. Owing to the complete vaccination of the town and District carried out some years ago, and the prompt action in each case, these outbreaks were always limited to the persons primarily affected. The Divisional Council and the Municipal Board have acted promptly and deserve all praise in the assistance and support given me in the suppression and treatment of the outbreaks.

Statement of outbreaks of Small-pox:—

(1) *Divisional Council.*

SITUATION.	Date of Disease.	Date of Commencement.	Date of Discharge.	Source of Infection.	No. of Cases.	No. of Deaths.
Environs ...	Oct. 11, 1904	Oct. 4, 1904	Nov. 14, 1905	Not known.	1 Col. Female	...
Elsenburg ...	Feb. 6, 1905	Jan. 27, 1905	Mar. 13, 1905	Paarl District	1 Col. Male	...
Mariendal ...	May 20, 1905	May 20, 1905	July 14, 1905	Elsenburg.	4 Col. Females and 1 Col. Male.	...
Bottelary ...	May 30, 1905	May 23, 1905	July 22, 1905	Not known probably Elsenburg.	1 Col. Male and 2 Col. Females.	1 Col. Fem. Infant.
Helderberg ...	Nov. 21, 1905	Nov. 14, 1905	Dec. 31, 1905	Probably Cape Town.	1 Col. Male.	...

(2) *Municipality.*

Stellenbosch ...	Mar. 12, 1905	Mar. 5, 1905	April 18, 1905	Not known.	1. Col. Male	...
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All the above cases were previously unvaccinated. Where there was more than one case, these had all been infected from the first at the date of discovery and prevention was impossible. The cases were all isolated and treated in tents. The contacts were carefully segregated and vaccinated and only allowed free after all possible infection was prevented. There were no European cases. The one death was that of an infant four days old, child of the female patient. This patient died more of inanition due to the mother's milk having dried up owing to the disease, than of Small-pox.

Tabulation of the Infectious Diseases :—

MUNICIPAL AREA.			
Typhoid Fever.	Tuberculosis.	Scarlet Fever.	Diphtheria.
7	12	12	7
DIVISIONAL COUNCIL.			
Typhoid Fever.	Tuberculosis.	Scarlet Fever.	Diphtheria.
2	1	1	1

From this table it will be seen that there was nothing approaching an epidemic in any of these diseases. In November, 1905, a very serious outbreak of Measles occurred. As far as the end of 1905 it was still limited to the coloured community. The mortality was very large, being over 12 per cent. Death was due mostly to Gastro-Enteric symptoms either complicating the disease or coming as a sequela. The disease is spreading to the District. A full report cannot be given, seeing that the epidemic is still in progress and that it is still to be seen whether it will attack the European community, and if so, whether in as severe a form as it has shown hitherto.

The serious fact that Tuberculosis is on the increase has already been noticed. The facts that the coloured community live close together, also that they cannot be taught the rudiments of care in the matter of infection or contagion, and that at times they prefer poor living to work will tend to make intelligent co-operation on their part very hard to obtain in any measures which may be framed for the stamping out of the disease.

I am still awaiting the erection of the promised *post-mortem* room at the Gaol.

(ii) SUB-DISTRICT OF SOMERSET WEST.

DR. WILLIAM HEWAT, ADDITIONAL DISTRICT SURGEON.

Since the establishment of a Municipality at Somerset West in 1904 a vast improvement has been made in the sanitary system and cleanliness.

(a) The water-supply for drinking purposes is obtained from the roofs of the houses and collected in tanks and in many instances from the Lourens River.

The Municipality are testing the water-supply from Waterkloof to see if there will be a sufficient quantity. If this is proved inadequate the supply will be obtained from the upper reaches of the Lourens River, where the water is absolutely pure.

(b) There is no sewerage or drainage.

(c) The collection of night-soil has been placed in the hands of a contractor, hermetically sealed buckets being used, thus causing a vast improvement on the old system. Slop-water, household and other refuse are collected by the same contractor.

(d) As far as is known there are no cases of overcrowding, and all dwelling-houses are kept in a satisfactory condition.

(e) All slaughtering is carried on outside the village. Butcheries and bakeries are all satisfactory.

(f) Food sold by licensed butchers and bakers.

(g) The Municipal Regulations are being strictly enforced with regard to the keeping of cattle, swine, etc.

(h) No Native Locations except De Beers' Explosives Works, where the sanitary conditions are as perfect as possible.

(i) The cemeteries are situate on the outskirts of the village and are in good order.

(k) The police do the best they can towards the abatement of nuisances.

(l) There is no Hospital accommodation in this Sub-District, also no isolation for infectious diseases.

(m) There were very few cases of Enteric, but there was one case of Amaas which came from the Strand and was sent back there. Many cases of Measles have occurred in the village, but in most cases very mild, and there have been no deaths as far as I know. The one case of Amaas had not been vaccinated. All contacts were vaccinated, and none contracted the disease.

SOMERSET WEST STRAND.

During 1904 and 1905 a great improvement has been made in the sanitary conditions at the Strand.

(a) Most of the water-supply is brought down in pipes from the reservoir, which is supplied from the Lourens River.

(b) Septic tanks are being used with satisfaction.

(c) Where septic tanks are not in use the night-soil is removed regularly by cart, the tub system being in vogue.

(d) I do not think there is any overcrowding. Dwelling-houses have increased rapidly since the beginning of 1904.

(e) The management of slaughter-houses, butcheries, bakeries, etc., is very satisfactory.

(f) This is carried on by licensed butchers and bakers.

(g) The Municipal Regulations are being strictly enforced with regard to the keeping of cattle, swine, etc.

(h) There are no Native Locations.

(i) The cemeteries are situate on the outskirts and are in good order.

(k) Nuisances are promptly dealt with.

(l) There is no Hospital accommodation at the Strand.

(m) Very few cases of Measles occurred. Eleven cases of Measles were treated in 1905. Nearly all these cases had not been previously vaccinated. In no case after vaccination did any contact contract the disease. The number of cases vaccinated was 294, and the results were very satisfactory. Notices were posted asking all residents to come up for vaccination twice a week. It is impossible to say the exact number of successful cases, as most of them did not come back again, but I know the results were very good. There were no deaths. The cases of Enteric Fever were mostly imported by visitors. There were a few cases in the lower reaches of the river, got from pollution of water-supply. No cases of Bubonic Plague occurred, nor any cases of Scurvy or epidemic Pneumonia.

GORDON'S BAY.

Gordon's Bay, with its splendid water supply, is increasing in size, and the place is being kept in good and sanitary condition under the vigilant care of the Village Management Board.

69. STEYNSBURG.

DR. A. V. SHINE, DISTRICT SURGEON.

(a) See 1904 report.

(b) Surface drainage of town excellent.

Sewerage and Drainage.—Nil.

(c), (d), (e), and (f) See 1904 report.

(g) Milch cows and goats are kraaled in town at night for milking, being sent to the veld every morning. Swine are not allowed in town.

(h), (i), (k) and (l) See 1904 report.

(m) During 1904 and 1905 there were twenty-eight cases of Enteric Fever reported in town with five deaths.

Diphtheria.—Thirty-three cases, eleven deaths.

Puerperal Fever.—One case.

Measles.—This is not a notifiable disease here, so I am unable to ascertain how many cases occurred in town and District.

There was an epidemic of this disease for some months, mostly of a light nature. I have already made a special report on this outbreak. Only one death has been registered.

Small-pox.—Nil.

Vaccination.—This is a dead letter here. In my last two reports I think I have laid particular emphasis on the thousands of Europeans and Natives in town and District who have never been vaccinated, and, as nothing has been done to improve matters, further reference to this matter appears useless.

Bubonic Plague.—Nil. Scurvy, Epidemic Pneumonia.—Nil.

NOTE.—With regard to the District Surgeon's remarks on vaccination the matter has received attention.

70. STEYTLERVILLE.

DR. H. KNIGHTS RAYSON, DISTRICT SURGEON.

The report deals with the years 1904 and 1905, and in referring to matters connected with 1904 the year will be mentioned, otherwise 1905 is to be understood.

(a) to (k) The conditions described in previous reports remain as before.

(m) Whooping Cough existed, more or less scattered throughout the whole District, in 1904.

In the same year an outbreak of Small-pox occurred on the farm Nashvale. The source of infection was untraced, had in fact been attacking one person after another until the owner's attention was drawn to it, some weeks having elapsed since the first case.

There were seven cases in all, three Coloured males, three females, and one European child of three and a half years, who had been vaccinated well in infancy and revaccinated ten days before taking the disease, without effect. All the cases were mild. The farm was put under voluntary quarantine by the owner. All the contacts were vaccinated without success. However, all, with the exception of three, had been vaccinated or revaccinated about six months previously. The spread of the disease was limited to the farm, which was under quarantine from March 14 to April 15. On the latter date disinfection was carried out.

The Willowmore Divisional Council had control, and supplied the necessary disinfectants. In the same year a case of Variola was discovered in the Cata (a small Native Location). The whole of the population resident there were vaccinated and guards placed on duty day and night.

No further developments took place, and the restrictions were removed on August 15th, the first and, fortunately, only case dating from the 25th July.

During the past year no infectious cases were reported to the Municipal Authorities, the District was also equally fortunate.

There has been no systematic vaccination of population of District since 1903.

71. STOCKENSTROM.

DR. ANDREW STEWART, DISTRICT SURGEON.

(a) The present water-supply is brought from the hills about six miles away by means of an open furrow, and is also distributed through the town of Seymour in open furrows. It is used by Europeans for irrigating the gardens and by the Natives in the location for all purposes—drinking, cooking, etc. The usual supply for drinking and cooking by Europeans is rain water collected by tanks, each house having a galvanized iron tank. Considering that contamination does take place, I have not been able to say that any case of sickness during 1904 and 1905 has been due to the water-supply.

(b) Nil.

(c) Every dwelling-house has accommodation for such, which is cleared away weekly by a man specially appointed. One Native school in town has no latrine, and the erf occupied by the school is in a most insanitary state in consequence. The trustees of the school have been notified by the Local Authority to erect a water-closet, but nothing has been done in the matter, although a water-closet from a health point of view is an urgent necessity.

(d) There are no overcrowded dwellings in town.

(e) Slaughtering of sheep and cattle is done in the open, and is well managed from a health point of view.

(f) Satisfactory.

(g) No swine are allowed to be kept in the village.

There are two cattle kraals alongside one of the streets, and the smell arising from one, especially of an evening is very objectionable and unhealthy.

(i) Cemeteries are satisfactory. Arrangements have been made to improve the Seymour cemetery.

(l) None.

(m) There have been a few cases of Enteric Fever during 1904 and 1905, but no epidemic in any part of the District.

In 1904 there was an epidemic of Measles throughout the District, and as a result many Native children died from Broncho-Pneumonia following Measles. There has been no cases during 1905.

Diphtheria.—There have been no cases during 1904 and 1905.

Small-pox.—There were no cases of Small-pox during 1904 and 1905.

Plague.—Nil.

Since coming to the District two years ago, I have only vaccinated one child residing in the District.

In my opinion all births and deaths are being notified to the Registering Officer according to requirements of the law.

Tuberculosis.—This is a subject which requires immediate attention. During the years 1904 and 1905 over thirty per cent. of the deaths I have notified have been due to Tuberculosis, and while at present this is among the coloured population nothing is being done to prevent its spreading among the white population. The Natives are very ignorant of anything connected with disinfection and prevention of disease. While notification of Tuberculosis is now compulsory still more should be done towards preventing the spread of this disease. If some strong preventive measures are not adopted, I am of opinion that the whole of the Hottentot race in Stockenstrom will in a short time be wiped out.

72. STUTTERHEIM.

DR. S. J. GRINSELL, DISTRICT SURGEON.

(a) Water-supply.—(1) District.—The District is well supplied by numerous streams of good quantity and excellent quality. During 1904, in common with the country generally, the great drought severely affected the spring supply. The average rainfall for the past ten years was 32·55 inches per annum. In 1904 this dropped to 25·31 inches, but 19 inches of this amount fell in January, February, and March, being not quite 6 inches for the remaining nine months of the year. During 1905 the rainfall was well maintained, the early September rains being especially welcome.

(2) Village of Stutterheim.—As in previous years the only public supply has been by open furrows. The majority of the houses are, however, fitted with over-ground iron tanks, almost as objectionable in many respects as the furrow supply. It is very pleasing to be able to report, however, that by the end of the year 1905 tenders had been accepted for the construction, etc., of the new pipe supply, which, it is anticipated, will be in full working order shortly after this report is in print.

The following is compiled from the returns and through the kindness of the Rev. Dr. Beste:—

	January.		Feb.		March.		April.		May.		June.	
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905
Rainfall in inches ...	7·48	1·10	7·29	4·06	4·07	1·94	0·73	2·27	0·69	2·48	0·18	0·58
Number of rain days ...	16	12	18	15	20	15	7	9	4	5	2	5
Maximum Temperature	98·0	98·5	97·0	95·5	93·0	96·0	93·0	86·0	81·0	85·0	77·0	69·5
Minimum Temperature	47·0	48·5	50·0	48·0	52·0	46·5	41·5	44·0	38·0	37·0	30·0	34·0
Greatest daily evaporation	0·50	0·88	0·50	0·63	0·50	0·73	0·85	0·50	0·60	0·74	0·80	0·45

	July.		August.		Sept.		October.		Nov.		Dec.	
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905
Rainfall in inches ...	0·12	0·09	0·28	0·77	1·08	3·18	1·92	6·88	0·67	1·39	0·80	4·34
Number of rain days ...	1	3	4	4	10	17	14	9	9	12	8	20
Maximum Temperature	75·0	78·5	85·0	80·5	89·0	87·5	92·0	89·5	99·0	95·5	94·5	100
Minimum Temperature	29·0	34·5	34·0	31·0	34·0	38·0	36·5	36·0	43·5	39·0	41·0	49·0
Greatest daily evaporation	0·50	0·75	0·92	1·00	1·00	0·60	0·66	1·15	0·74	0·74	0·88	0·89

(b) Sewerage and Drainage.—Towards the end of 1905 the Municipal Council decided to kerb and gutter the main street. It is intended, I understand, to tackle the remainder of the streets as funds permit.

No sewerage scheme exists.

(c) Collection and Disposal of Night-soil, etc.—The pail system is in vogue, and the Sanitary Contractor does his work well.

House refuse, etc., are removed by Scotch cart weekly.

No provision exists for the removal of slop-water, the onus for disposal of same being thrown on the individual householder.

(d) One instance of overcrowding was reported and dealt with.

(e) No complaints under this heading have been received.

The slaughter-houses are placed outside the village area.

With the advent of the new water-supply, it will be possible to arrange for Municipal slaughter-houses, with suitable arrangements for flushing with water.

(f) The sale, storage and preparation of human food are carried on in a satisfactory manner.

(g) The kraaling of cattle, sheep and swine still goes on within the village area. Just at the close of 1905, the Municipal Council made a great step in the advancement of the public health by deciding that after a certain date (early in 1906) no swine should be kept in the village. Many an unwholesome corner will as a result soon disappear.

(h) There are six chief locations as in former years with a total population of about 3,300. Three of these locations, viz., Ceynu, Emgwali and Mostburg, are under their own local authority, the others being under the control of an Inspector. The restrictions regarding the sale of liquor to Natives in force in 1904 were, I regret to say, removed by the Licensing Court in 1905. This certainly, whatever else it may do, does not tend towards the reduction of crime amongst the Natives. The order maintained in the locations, as far as I could judge, was good. Sanitation nil.

(i) The cemetery is well situated and suitable for its purpose. Its management is vested in the local Municipal Council.

(k) The Council, during the past year, have done good work. The kraaling of swine within the village area has been stopped, plans have been passed and tenders accepted for the new water scheme. Proper drainage of the streets has received attention, and a more rigid inspection of the yards is made by the Street-keeper.

(l) There is no Hospital accommodation.

(m) During the past two years the health generally of the village and District has been good.

Small-pox.—An outbreak occurred at the Mission Station at “Keilands.” This was confined to three Natives. With the aid of the Missionary these cases were isolated. Vaccination was extensively performed. I am glad to say the disease did not spread amongst the numerous Native population that surrounds the Mission. Cost of outbreak about £15 15s. A small outbreak occurred in the village. The first case was a White tramp, temporarily lodging in the village. The source of infection was definitely proved to be East London. One of the contacts, a White child, developed the disease in a modified form. This child was vaccinated some days before the disease manifested itself. Total cost of this outbreak, £53. All the steps for the protection of the general health were taken under the authority of the local Municipal Council.

Vaccination during the past two years has been carried on and the results of the operation satisfactory.

Enteric Fever.—Eight cases in 1904 and 1905; 6 in the villiage, 2 in District; 1 death. Infection in seven of these cases could be traced to outside sources.

Scarlet Fever.—In 1904, 2 cases; 1905, nil.

Measles. Wide-spread epidemic in 1905. Mortality amongst Europeans nil. Amongst Natives no death was notified as due to this disease, but I believe some of the fatal cases of Bronchitis and other lung conditions which occurred at this time were the direct result of this disease. Diphtheria, Nil.

Dysentery and Allied Bowel Complaints.—Very little serious disease under this heading amongst White adults. Amongst Native children great deal of Zymotic Enteritis with high mortality has occurred.

Phthisis.—Very prevalent in the Native section of the population and unquestionably the cause of the greater part of the high mortality rate. Unless the Native races are to seriously suffer, some steps must be taken to combat the ravages of this disease amongst them, and at the same time deal with the almost

equally serious death-rate amongst the children from Zymotic Enteritis. The great spread of Phthisis may be due in part to the change of food and clothing, associated with immorality and inebriety, but I believe it to be the result of direct infection. The free use of one another's blankets, coupled with the pernicious habit of completely enveloping the head in them when sleeping, renders this spread easy.

The general cleanliness of the village has within the past few years distinctly improved.

73. SUTHERLAND.

DR. R. H. H. HAYDEN, DISTRICT SURGEON.

(a) The villagers of Sutherland get most of their water-supply from deep wells, the borehole penetrating the bed-rock to a water-bearing stratum, which varies in depth from the surface of the rock of from twenty to one hundred feet. The water from these wells smells strongly of sulphur, and is hard for washing with.

Some people get water from a spring in the adjoining hills, which water is conveyed to the village in an iron pipe, the surplus of this water being used for gardens.

There is also a large dam near the village, but the water from it is not used for domestic purposes; the water from this dam is only used for gardening.

The location, which is situated only a few hundred yards away from the village, gets its drinking water from a fountain or surface well, which is situated practically between the village and location.

Some few of the White population have tanks in which they collect water from the house-tops for drinking purposes.

The water from the deep wells is pure at source, but is liable to contamination from dust and percolation in the open pits in the soil above the rock, as practically none of these pits are properly covered, and then, as there is no drainage in Sutherland, and slop-water is thrown all over the village, there must be a considerable amount of percolation from the surface into these pits, more especially when such slop-water is thrown adjacent to such pits.

The rain-water collected from roofs into tanks is liable to contamination from dust on roofs and gutterings of houses from which it is collected.

I would recommend that all pits above boreholes should be properly covered and lined with cement.

(b) There is no sewerage or drainage in this village.

(c) Night-soil is removed by two old Natives to a suitable place in the veld, where the buckets are emptied into a deep trench, which trench is covered in when necessary and a new one dug.

With reference to privy accommodation, this is a very difficult matter, as many families (Poor Whites) live in one or two rooms, and should each of these have a separate privy, the village would almost appear as if it was nothing but an accumulation of privies.

These privies, and the emptying of the same, are as stated in my last report, that is, the Municipal Council leaves it to owners to have them emptied, but a Native has to inspect privies and report any that are not sufficiently clean, and the owners so far have not objected to have them attended to when called upon to do so. Still many habitations have not a privy, and some months ago the Municipality had beacons erected four white-washed around the village, and beyond such marks persons who have not or will not use a privy, are supposed to go before answering the calls of nature. Many such persons go beyond these beacons, but then, at night, many do not do so, but get into stables and corners of yards, etc., and make such places answer for a privy.

Slop-water is disposed of as stated above.

Household and other refuse are carted away to veld when in any considerable quantity in yards by owners of yards.

(d) The overcrowding and dwellings unfit for human habitation still remains as it was when I last reported, but the Municipal Council are taking steps to remedy matters, but how far it will proceed to a successful termination, I cannot say.

(e) There is no slaughter-house. All slaughtering is done in the vicinity of the public kraal, in the open veld, about twelve hundred yards from the nearest dwelling.

There are two butcheries. These places of business ought to have their floors cemented and keep the walls lime-washed regularly. It would also be a step in the right direction if the utensils, as blocks and tables, were kept cleaner, and also if the ventilation was better.

Bakeries are carried on by two or three private families in their private residences.

There are no dairies.

(f) Meat and bread as described above.

(g) A few milch cows are kept in the village at night and run on Commonage by day. There are not more than two or three pigs in the village. The only other animals kept in the village are horses and domestic animals.

(h) The Native Location is the same as last reported both as to sanitation, overcrowding and order.

(i) Cemeteries are as stated in last report. Some twenty Natives have been interred in their new cemetery. There are steps being taken for the removal of the cemetery for White persons.

(k) Until a few months ago, things were as in my last report, but in October I accepted an honorary appointment at Ward Master, so that I could or might be able to do something to the general cleanliness and abatement of nuisances in the village. Since then there appears to be a considerable improvement, and I hope that infectious diseases may be less during the coming year.

(l) None.

(m) The following cases of infectious disease have been notified:—Diphtheria, 18 (E. 7, C. 11); Puerperal Fever, 1 (E.); and Enteric Fever, 21 (all Europeans).

Lately all cases of Diphtheria and Enteric in poor coloured people are isolated in the old Contagious Diseases Hospital, and this has been found to prevent the spread of the diseases. I instruct all White and better classes in the fundamental principle, of preventing infection and spread, and although all do not pay attention to such instructions, still it carries weight with many, and I am hopeful that we may in time free the village from Enteric as it was before the War—our Enteric being a legacy left by the Military.

I recommended that the Contagious Diseases Hospital should be enclosed with wire netting to render isolation more perfect, and this the Municipal Council were willing to do, and ordered wire and poles for same, but as Government would not contribute to same it was never carried out.

There has been no Small-pox or Measles.

Vaccination was carried out in the District early in 1904, and at different periods in the village; I do not know what percentage was successful.

The principal cause of Enteric is owing to some persons throwing the excreta of patients in yards, etc., where the excreta dries and may be inhaled the same or following Summer and infect others. This reason is substantiated by the fact that the disease clings fast to some particular quarters of the village.

There has been no Bubonic Plague here and nothing has been done in precautionary measures against same.

74. SWELLENDAM.

(i) SWELLENDAM.

DR. GEO. JAS. CHADWICK, DISTRICT SURGEON.

(a) The water has been supplied in pipes for more than eighteen months, and is now pure, and sufficient in quantity.

(b) There is no drainage, but the sewage is collected by stercus carts, in closed pails, and buried at least a mile from the village.

(c) The night-soil is disposed of as above-mentioned. Slop-water is thrown on the manure heaps.

(d) There is very little overcrowding of dwellings and none unfit for human habitation.

(e) These are all well managed and in no way affect the health of the town.

(f) This is all done with due regard to public health.

(g) Cattle are kept in sheds, swine in styes, and other animals are suitably provided for.

(h) We have not Native Location here.

- (i) Cemeteries are far from the village and well managed.
- (k) There are none to abate.
- (l) The Contagious Disease and Leper Hospitals, attached to the Gaol, are now no longer in use, by order of the Government.
- (m) There has been no infectious disease prevalent during the years 1904 and 1905 with the exception of a few sporadic cases of Enteric Fever. No Diphtheria and no Small-pox occurred. Measles has not spread into this District; but there has been a rather severe epidemic of Whooping Cough, with a few deaths (1905). It is now subsiding, although a few cases still exist. I have not performed vaccination since July and August, 1904.

(ii) SUB-DISTRICT OF BARRYDALE.

DR. A. DUNLEY-OWEN, ADDITIONAL DISTRICT SURGEON.

(a) The water-supply is derived from a stream which at its source in the mountains is of good quality and sufficient in quantity. But samples of water, however, taken at various times from the water furrows in the village, all shewed gross sewage contamination; and during half the year the quantity is deplorably insufficient. On August 19th, 1904, I sent samples of water to Cape Town, in terms of a letter of July 7th, 1904, from the office of the Medical Officer of Health for the Colony. Later in the year, Dr. E. N. Thornton, Additional Health Officer, visited Barrydale, and, though I have not seen his report, from what he said to me it would fully confirm all I said. Severe attacks of Gastritis occur every year, and are likely to continue, if some water scheme is not adopted. The Village Board is more ornamental than useful, perhaps, if the number of members were to be increased from its present number of three to five, the resulting board would be less of a "family party." No steps whatever have been taken to improve the supply. Evidently the Village Management Board is satisfied, as in their last report they say: "It is very pure, the furrow being kept clean and in good order, and is adequate for all requirements." In the face of this report, I can do nothing.

- (b) No system of sewerage or drainage exists.
- (c) Night-soil Disposal.—Very few houses have W.C.'s, therefore the veld is much befouled, especially in the neighbourhood of water furrows.
- (d) There is much overcrowding amongst the Coloured population.
- (e) The two butcheries and one bakery are well conducted.
- (f) Five shops, supplying human food, are all clean and well kept.
- (g) Kraals for cattle abound in the village, and should be suppressed, the nuisances arising from them during the hot season are intolerable—smell and flies.
- (h) No location.
- (i) One cemetery; well kept.
- (k) No attempt to abate nuisances.
- (l) Hospital scarcely needed; community too small.
- (m) The outbreak of Diphtheria in May, 1904, was fully reported on in my report for the half-year ended 30th June, 1904.

During 1905 one case of Diphtheria occurred at Witbooriesrivier, three hours from Barrydale. The case was first seen on the 31st December, and the source of infection was not ascertainable.

During November and December there was the usual epidemic of "Diarrhœa and Vomiting." No deaths were recorded.

There have been no cases of Small-pox, Enteric or Measles, which is fortunate, for with our present water-supply an epidemic would decimate the village.

75. TARKA.

DR. WM. H. FERGUS, DISTRICT SURGEON.

- (a) No alteration since last report except that supply is weaker.
- (b) to (l) No alteration.
- (m) During the period under consideration there was an entire absence of severe epidemic disease. A few isolated cases of Enteric Fever and Diphtheria were

As an outcome of Dr. Thornton's visit to Barrydale strong recommendations were made by the Department to the Village Management Board as to the necessity of adopting a scheme for the supply of drinking water to the village in pipes. Also that the Board should undertake the removal and disposal of night soil and prohibit under penalty any but the authorised contractors or employees of the Board from so doing.

noted, but no cases of Small-pox occurred. There being an absence of epidemics no special measures were taken by the various public bodies. A few cases of Measles occurred, but the type was not severe.

Vaccination was performed both in the town and District with somewhat better results than in the previous two years.

76. TAUNGS.

DR. CHAS. W. BROWNE, DISTRICT SURGEON.

As there is nothing specially noteworthy in either year, I have reported on them together.

The general health has been fairly good, and there have been no cases of disease out of the ordinary routine groove.

(a) It is much to be wished that our Natives could have a good supply of pure water for drinking and washing purposes. They go long distances to get water from the river for drinking, and this is intensely polluted by all kinds of filth from the stad. It is quite enough, when there is a heavy downpour of rain, to watch the water rushing down to the river; sight and smell both bearing witness to the nature of the contamination being carried down, and this water further on is drunk by both Whites and Coloured.

(b) to (h) As before.

(i) Native burials are still carried on in the old way, in the midst of the living, and often close to banks of rivers.

(k) I can suggest but little. This is a Native Reserve. Still it seems a pity that these poor people should be unable to have any sanitary arrangements carried out, absolutely no provisions for public decency or health. Could they only have some wells and pumps, they might have pure water to drink, and be able to cultivate that virtue which is akin to Godliness. They can certainly not be healthy without pure water, and miserably dirty as a very large number of these people are, it seems hard to blame them, seeing that for the greater portion of the year the river is nearly dry. I have at times to make a *post-mortem* examination in a country village, and find great difficulty in getting enough water to wash my hands. I should like to see a good central well and pump in all our different Native villages.

(l) None.

(m) No infectious diseases such as Enteric Fever, Diphtheria or Small-pox occurred. Our one great infectious disease is Syphilis, and I do not find that it is perceptibly on the decrease. On the contrary, my impression is that, since the circumcision of 1904, a small, and that of 1905, a very large one, it is on the increase. So many utterly neglected cases do not come now; people seem to have grasped the fact that they had better seek relief at an earlier period, and this augurs better for the future.

But I have great trouble to get them to continue treatment when they are well, or consider themselves to be so. It is hardly stretching a point to say that probably as many as two hundred of these patients, practically speaking well, fail to report, so that they appear in the Lapsed instead of the Cured column, where their place should properly be. I come across them later on, hear of them from different sources, and know they are well, but the Official column, "cured," cannot be filled in. A good many again, old, stupid and indifferent, come once, perhaps twice, and then stop attending, and it is difficult to find them out amongst so many thousands, but a very large number avail themselves of treatment, until, as I have pointed out, they dismiss themselves as cured. With Hospital treatment or some regular supervision, combined with good diet, most of these people, with some few exceptions, would be much more quickly relieved; as it is, the want of sound nourishment, good meat and bread, seems to me to be a great drawback in treatment, and renders length of time, required for treatment, longer than would otherwise be necessary.

With regard to circumcision carried out, as of course it is, with septic instruments, and no surgical cleanliness, it cannot do otherwise than help to spread the disease. There were patients of mine at the last circumcision, 1905, and within the last ten weeks of 1906 I have had cases of secondary disease in persons, who were then circumcised.

There are, of course, other aspects of this Bogwera, social, political and religious, which do not come within my province to write about, whatever my opinions may be on the matter.

77. TULBAGH.

DR. HENRY P. PAYNE, DISTRICT SURGEON.

The usual public health duties have been performed by me during the year, but nothing special has been required under this head.

(a) A supply of good potable water is brought down by pipes from a mountain source and distributed to each house in the village. It is worthy of note that since this water has been in use—some seven years—no case of Enteric Fever has originated in the village, although several cases have come in for treatment from other villages. Before this period the drinking water was obtained from an open furrow running down the side of the village street, and cases of Enteric were of frequent occurrence yearly.

(b) There is no sewerage.

(c) Cess-pools are not permitted, and the tub system is in use, the Municipal Council removing and cleansing the tubs in an efficient manner.

(d) I do not think there is any overcrowding. The inhabitants are very well housed, and actual pauperism, in the European sense, is very rare indeed.

(e) No slaughtering is allowed in the village, and the four slaughter-houses in the District have always been well kept when I have inspected them.

(f) There is now no cause of complaint on this head.

(g) Occasionally pigs are kept nearer to dwelling-houses than is advisable, but there has been considerable improvement in this respect of late years.

(h) As far as the houses are concerned, the location is cleanly, but the roads therein require the more frequent attention of the scavenger.

(i) The burial grounds are not likely to be prejudicial to the health of the community.

(l) There is a small Lazaretto about half a mile from the village, affording rough accommodation for, say, four Natives, but it could not be made use of by White persons. Cases of disease calling for isolation are, however, so infrequent, that the erection of a larger building would scarcely be justified.

(m) During the year the only infectious diseases observed have been Influenza and Measles. The Influenza was very general but of a mild type. In the village and immediate neighbourhood the mortality from Measles was extremely small, but I am informed that at Saron Mission Station—some three hours from the village—there has been an enormously high death-rate from this disease. The epidemic of Measles occurred in 1905.

78. UITENHAGE.

DR. F. S. BUTLER, ACTING DISTRICT SURGEON.

(a) The water service is excellent, both in supply and delivery. The whole of the water for domestic use is piped. Irrigation water is supplied in open furrows.

(b) Nil.

(c) Night-soil is collected in carts and properly buried at a suitable site.

Slop-water, etc., are not dealt with in a proper manner, in fact they are not dealt with at all. I believe that the indiscriminate manner in which slop-water is thrown into yards and streets accounts for a great deal of the sickness in this town. I consider that the Local Authority should have the slop-water carried away regularly, and disposed of in a suitable manner. The sooner this is attended to the better will the health of the town become. The Health Officer of the Colony should give this point his particular attention.

(d) Nil.

(e) These businesses are carried on in a satisfactory manner.

(f) and (g) Good.

(h) The Locations are excellently conducted. The Location Inspector deserves credit for the manner in which the Locations are controlled.

(i) Very good.

(k) Nil.

(l) There is a small Hospital which was used at one time for Syphilitics, Plague cases, and Small-pox cases. If I am not mistaken it is now rented for other purposes.

(*m*) Enteric was somewhat prevalent during 1905, and there were several deaths. I wrote a special report on this matter, and therefore it is not necessary to go into it again, except to say, that the night-soil is now buried.

Diphtheria was present during 1905, and I must say that I consider the want of attention to the slop-water question is to be blamed for the presence of Diphtheria to a great extent. The emptying of slops in the yards and streets forms a fit "nucleus" for the growth and development of the bacteria and bacilli producing disease. Measles was conspicuous by its absence. Only 170 persons were vaccinated during 1905. I think that vaccination should be performed throughout the District.

79. UNIONDALE.

DR. H. MUNRO MACKENZIE, DISTRICT SURGEON.

I have only a few remarks to add to my report for the half-year ending June 30th, 1904, as matters appear to be in the same state as at that time, and are likely to remain so for some time to come.

(*a*) The water-supply remains the same. I fear that there is now no hope of the storage dam being built, as a natural dam on the stream which supplies water to the town was completely silted up during the heavy rains in September, 1905. The Municipal Council is afraid that the same fate would happen to their dam if it were made.

(*b*) to (*l*) Same as in last report.

(*m*) Seven cases of Enteric Fever were reported as occurring in the town during 1904, and three in the country. During 1905 four cases were reported as occurring in the town, and none in the country.

Two cases of Scarlatina occurred in the town in 1905, and one case of Leprosy in the country.

The outbreak of Diphtheria mentioned in my last report seems to have died out, as only two cases were reported after June 1904.

I am unable to give any information as to the prevalence of Measles, as this is not a notifiable disease (as I consider it should be), but I believe there were a good number of cases during 1904.

Vaccination.—I vaccinated 1,111 persons during 1904, and 1,098 during 1905. The lymph in both cases was obtained from Grahamstown, but I am unable to give any estimate of the amount of success obtained, as no record visit was allowed, but I believe that the vaccination in 1905 was fairly successful.

I discovered eight new cases of contagious disease during 1904, and fourteen during 1905. I regret to say that seven of the latter cases were Europeans. Copies of the Colonial Office Circular relating to contagious diseases were sent out, but with very little apparent success, as I have had only three cases sent to me as "suspects," one of which proved to be Syphilis, the others suffering from innocent skin diseases. All the other cases came voluntarily.

80. VAN RHYNSDORP.

DR. S. R. HAWORTH, DISTRICT SURGEON.

As I only assumed the duties of District Surgeon here in June, 1905, I regret to be unable to furnish any report for the year 1904.

(*a*) The water-supply is practically entirely derived from wells, the average rainfall being too slight—about six inches per annum—to encourage the use of tanks. Where the wells are properly covered in, the water, although somewhat brackish, is on the whole good, and the supply ample. Unfortunately, on most premises, the wells are very carelessly covered, and the water liable to pollution.

(*b*) Sewerage and drainage are unknown.

(*c*) Night-soil is regularly collected and buried at a place outside the village.

(*d*) Overcrowded dwellings and dwellings unfit for human habitation are the rule amongst the Coloured people.

(*e*) and (*f*) Three butcheries, fairly well managed, exist, but there is no slaughter-house, the stock being slaughtered and dressed in the open. A bakery and mineral water manufactory are both well conducted.

(g) Mules, donkeys, pigs, etc., are allowed to wander at will through the village.

(h) There is no proper Location, the Coloured people being scattered over the whole place. A considerable number, about eighty, herd in wretched huts (mostly made of old sacking), on a farm immediately outside the village. Nothing in the way of a latrine is provided for those people. I am told this place is outside the jurisdiction of the Village Management Board, although within three minutes walk of the Government Offices.

(i) The cemetery proper is not detrimental to public health, but the collection of Natives previously referred to bury their dead within seventy yards of the huts.

(k) A Sanitary Inspector has been appointed by the Village Management Board.

(l) None.

(m) Enteric Fever appeared in the village in July, 1905. Three members of one family were attacked, all recovered. The outbreak was due to polluted water. The Board had the well cleaned out and properly covered, when no further cases appeared.

Four cases of Diphtheria were notified in June and July, one ended fatally, the others recovered. The origin of the first case could not be discovered, the others were undoubtedly infected by this case. Neither Measles nor Small-pox, so far as I am aware, appeared during the year. No vaccination was undertaken in 1905.

A slight outbreak of Scurvy appeared in the Gaol towards the end of the year, four prisoners were affected, but speedily improved under change of diet. I think the prison fare was the cause, the Natives here being large meat eaters when on the farms at work.

81. VICTORIA EAST.

DR. W. E. KELBE, DISTRICT SURGEON.

(a) The water-supply still remains the same as before, namely, by open furrows polluted by man and beast. In addition to this there is the uncertain supply of rain water stored in tanks, which is frequently, after a drought, worse than the furrow water, being nothing but a concentrated essence of decaying animal and vegetable matter. Nothing but a proper supply through pipes from filter beds will give water pure enough for drinking, as it is next to impossible to keep tank or furrow water free from pollution. A good number of Municipal erven were sold about eighteen months ago, and the proceeds, nearly £2,000, were to be chiefly devoted, I understood, to the part payment of a water scheme, but the money has gone elsewhere, and been spent on things for which it was not intended.

(b) Nil.

(c) A better system prevails for the collection of night-soil than previously, but the buckets should be removed on the cart, and clean ones substituted instead of the present system of emptying the night-soil into the cart and returning the same bucket.

Household refuse is removed in an open Scotch cart, which often leaves a trail behind it. The cart should be a closed one.

(d) Owing to the arrival in the village of a considerable number of Indians, there has been a tendency to overcrowding in one or two cases.

(e) No proper slaughter-houses have been constructed, slaughtering being carried on in the same manner as described in my previous reports.

(f) The same as heretofore.

(g) Most unsatisfactory, as some favoured individuals still keep goats, pigs, etc., in the village.

(h) The number of Native huts on the Municipal area has been allowed to increase considerably during the last few years, and they are now scattered about in most undesirable positions. These huts should certainly be removed to one locality, and be carefully supervised by the Sanitary Inspector. I have previously complained of the position of some of them just above the main water furrow.

In this connection the question of providing proper latrines for the Natives who are either employed or detained in the village should receive the attention of the Local Authority. At present the state of affairs is most unsatisfactory, as

usually a hill just above the outskirts of the village, any hole in the ground, or any other place just out of sight, is made use of for this purpose.

(i) Same condition as before.

(k) No alteration.

(l) None exists.

(m) There have been no epidemics of infectious disease in the Municipal or Divisional areas among Europeans, and none have been reported to me among the Natives. There have been a few isolated cases of Enteric Fever and Diphtheria, in which the precautions taken by the individual families rendered it quite unnecessary for the Local Authority to take any action.

There have been a few cases of Measles, with no deaths, of a mild type.

There has been no Small-pox.

The health of the District on the whole has been remarkably good. In the village out of a population of 791 Europeans (including Lovedale), there have been during 1905 ten deaths, and in the Rural area out of a white population of 770 there have been thirteen deaths.

82. VICTORIA WEST.

DR. THOMAS E. JONES, DISTRICT SURGEON.

(a) The water-supply of Victoria West remains as stated in previous reports. The supply, however, owing to the prolongation of the drought during 1904-1905 has been very low.

(b) Sewerage and drainage none.

(c) The collection and disposal of night-soil are as previously reported, and are quite satisfactory. The same refers to disposal of slop-water and household refuse.

(d) No overcrowding has been brought to notice, and no dwellings unfit for human habitation.

(e) The system of slaughtering as reported in previous reports is objectionable. A Municipal abattoir should be established. The bakeries are satisfactory. Dairies are as good as usually seen in up-country villages.

(f) Very few cattle are kept in the village, and no complaints were made. The same applies to swine and other animals.

(g) The Native Location requires careful supervision. There has been no outbreak of infectious disease. Syphilis is however very prevalent, and I consider it necessary that provision for treatment of the Secondary phase of the disease should be made in the Hospital.

(i) Cemeteries and burial grounds are well cared for.

(k) The abatement of nuisances is effectively attended to by the Local Authority.

(l) The Hospital for accommodation of cases of infectious disease was condemned last year. No other provision has been made.

(m) The following cases of infectious disease were notified:—

Enteric Fever, 22 (1904), 4 (1905); Diphtheria, 1 (1904), 4 (1905); Scarlatina, 15 (1904), 38 (1905).

The condition of the water-supply is enough to account for the cases of Enteric.

The above are cases reported to the Municipality, and they individually received the careful attention of the Local Authority.

In dealing with the epidemic of Scarlatina it was found very difficult to control the isolation of the cases, as they were mostly of a particularly mild nature. I frequently saw cases which had run their course without attracting any attention, so mild were the symptoms, and in consequence were never notified.

In May of 1905, I proceeded to Vosburg, where an outbreak of Diphtheria was reported. I saw four cases, they were inoculated and isolated, two deaths had occurred previous to my visit. The cases treated recovered. The Municipality of Vosburg rigidly isolated the cases, and disinfected the dwellings, etc., after their convalescence. During the month of May three cases of Diphtheria occurred in the village of Victoria West. The one case, a Native, brought into the village from Modderfontein, was placed in the Isolation Hospital. All three cases recovered under serum treatment.

On the 6th July another case occurred in Main Street, on the 5th of November a child was brought into the village from farm Eizerkoppen, and was found to be suffering from Diphtheria, which proved fatal.

On the 20th November four cases were reported from Adriaanskuil, a farm adjoining Eizerkoppen. I was directed by the Divisional Council to visit them; one case died within a few seconds of my first arrival; the other three cases recovered with serum treatment. After convalescence the buildings were thoroughly disinfected.

An outbreak of Small-pox at Vosburg, in July, 1905, comes into the report of the Additional District Surgeon. On the 15th July, I proceeded to Vosburg for purposes of public vaccination, and after that continued my tour of the District, which was completed by the 1st of September. A large number of children in the District remain unvaccinated.

On the 2nd of August I was directed to visit Vosburg to report upon the outbreak, and this was done.

Measles has not been epidemic in the District since 1901.

(ii) SUB-DISTRICT OF VOSBURG.

Owing to decease of Additional District Surgeon no report furnished.

83. VRYBURG.

DR. W. M. NUGENT, DISTRICT SURGEON.

The health of the prisoners has been good with the exception of the usual trivial ailments; a few were treated for Scurvy, and these came from the outlying district.

(a) The main water-supply is obtained from a fountain; it is of good quality, and not liable to pollution.

(b) Sewage is removed some distance from the town. Drainage is worked by stone furrows.

(c) The dry earth system is very efficient, and night-soil is deposited east of the railway line.

(d) No overcrowding has been brought to my notice.

(e) Slaughter poles, butcheries, and bakeries are kept in a sanitary condition.

(f) Stores are efficient.

(g) Several cattle kraals are still in the town, and will probably cause a great deal of Ophthalmia during the summer months.

(h) The Native Location is situate south of the town, and in good order.

(i) The cemetery is not liable to contaminate the water supply.

(k) Nil.

(l) There is a contagious diseases Hospital with accommodation for 24 patients.

(m) There were three cases of Enteric Fever.

84. WILLOWMORE.

DR. RICHARD J. D'ARCY, DISTRICT SURGEON.

The general health of the District for the first half of 1904 having been dealt with, and published, it is unnecessary to recopy the report.

During the second period of the year the health of both village and District was very good. I find there were no cases of infectious diseases reported to Local Authorities in the District, and only one mild case of Scarlatina in the village.

(a) to (l) Coming to the year 1905, under these headings I can only reiterate what I have so often before reported, water-supply insufficient and bad, sewerage non-existent, and under the other headings, no change for better or worse.

(m) With regard to infectious disease,

Enteric.—No cases were reported in village or District.

Diphtheria.—During the month of February one case was reported in the village, the result was fatal, in spite of anti-diphtheritic serum.

Another case was reported on 8th July, also in the village, a European male, aged nine years. The child had been for his holidays on a farm, Vlaakteplaats, Oudtshoorn Division, where the disease was rife, and had evidently caught the in-

fection there. The child recovered. The source of infection in the first case could not be traced.

In the District there was a severe outbreak at the farm Kalkraal. I find that nine cases were reported to the Divisional Council. They were all Europeans, five males, four females; of the males three were adults and two children, of the females three were adults and one a child. The ages ranged from fifty-three years to nine years. Two cases had died before medical assistance arrived. The cases were isolated and treated with anti-diphtheritic serum. I believe two of them, an adult male and an adult female, proved fatal. They were under the care of another medical man, and did not come under my notice. As the people were in a good position, and carried out isolation and disinfection, action by the Divisional Council was not required. The source of infection was a neighbouring farm in the Beaufort West District.

Another case was reported at a farm quite fifty miles from Kalkraal, a European female, aged six years. This case did not come under my notice, and I believe recovered. The source of infection is reported as unknown.

Scarlatina.—A mild case was found in the village in February. The child (European) was attending the village school. I could not trace the source of infection; none of the other children, four in number, in the same house were attacked.

Two more children were found on the same date in May, both attending the same school as the previous case, and two more, one my own son, on June 9th. I came to the conclusion that the infection was in the class-room, the village infant school which is detached from the main school buildings.

Accordingly we had the room thoroughly disinfected and cleansed, and the walls lime washed. No more cases came under notice.

Measles.—I have not seen nor heard of a case for a long time.

Small-pox.—On the 11th of August a Native was brought into the village, he was examined, and it was thought to be a case of Small-pox. I placed him in Hospital, after due observation I began to doubt the accuracy of my diagnosis, and a long correspondence ensued with the Medical Officer of Health for the Colony. From a photograph and my description he confirmed the diagnosis of Small-pox, but finally the case proved not to be such, and after lengthy observation, the case was discharged.

Vaccination.—An extended tour was organised in the District in 1904, 1,313 cases were operated on. In 1905, 911 persons were vaccinated. The lymph, from my experience in the village, was good, and from what we heard from the District, the results were fairly satisfactory.

I had one case of Scurvy in the gaol, the prisoner was removed to another station. There is nothing further calling for comment, except that since the closure of the Contagious Diseases Hospital, no cases of Syphilis have been treated, the patients discharged, uncured, have been lost sight of, they do not come for examination or medicine.

85. WODEHOUSE.

(i) WODEHOUSE.

DR. E. R. ROWLAND, DISTRICT SURGEON.

(a) The water-supply for the town was scanty for the first six months of 1904, owing to the severe drought; the reservoir being empty, water for drinking purposes was collected from springs into tanks, and carried by pipes to different centres of the town. The Municipality augmented the general supply of water by boring.

During 1905 the supply was better owing to heavy rainfalls, the reservoir becoming nearly full; this water, however, is not suitable for drinking purposes.

(b) There is no drainage or sewerage.

(c) The night-soil, slop-water, and household refuse are removed by the Sanitary Contractor satisfactorily, and deposited at some distance from the town.

(d) There are no overcrowded dwellings or dwellings unfit for human habitation to my knowledge.

(e) The slaughtering takes place about half a mile outside the town, and is carried on in a cleanly manner.

(g) There is a certain amount of cattle kept in the town, chiefly for milking purposes; during the day they graze on the commonage.

(h) The Native Location is under the control of the Municipality, who have appointed a Superintendent to look after same, it is kept in a fairly orderly and clean condition. There are no Native latrines or other sanitary arrangements.

(i) The cemetery is in good order.

(l) There is no Hospital accommodation here except the gaol Hospital and a Lazaretto for Small-pox if needed.

(m) I certified to one Leper during 1904, she was sent away.

The health of the town and District was not very good during 1904. There was a fairly large number of cases of Enteric Fever, thirty cases in all in town, and about five cases in the District.

There was an epidemic of Diphtheria, at Bouthoek, in the District, with heavy mortality; this I put down to the length of time taken before sending in for medical treatment, and also to the great distance from town; the majority of cases injected in time with Diphtheritic serum recovered. There were also several other cases in the town and District, but all recovered.

There were a few cases of Scarlet Fever in the town and District.

There were no Measles.

There is generally an outbreak of Enteric Fever every year more or less since the war; this generally occurs after a rainy season.

The health of the town for 1905 was considerably better than the previous year, there being much fewer cases of Enteric Fever, nineteen in all, and one death, the cases being much milder in type than in 1904.

There were five cases of Scarlet Fever, one case of Measles and two cases of Diphtheria.

(ii) SUB-DISTRICT OF INDWE.

DR. R. J. LOVE, ADDITIONAL DISTRICT SURGEON.

(a) In the winter of 1904 the water-supply from the Indwe River failed, and the Indwe Company erected an electric pump on the bore-hole on the Market Square, from which a plentiful supply of water was obtained, this water was tested and found to be pure. This was the sole supply for three months, when the rainy season started the Indwe Company stopped the supply, and began pumping from the Indwe River again, at the same time cutting off all the private leadings throughout the town. There is only one standpipe in Barkly Street to supply the whole town, which is most inadequate.

(b) and (c) No change since last report.

(d) In April, 1905, I, at the request of the Municipality, examined a number of houses in the lower part of the town, and reported that a number of them were unfit for human habitation, and recommended that a number of them be pulled down, and others repaired, but so far the authorities have taken no steps in the matter.

(e) Same as last report, except that a tin shanty has been erected as a slaughter-house on the commonage.

(f) and (g) No change.

(h) The Municipal Location is kept fairly clean, and good order, as a rule, prevails; the general health of the Natives during the two years has been good, but Syphilis and Phthisis seem to be spreading.

The Indwe Company's compounds are kept clean, and the health of the Natives has been good, except for occasional slight outbreaks of Scurvy.

(i) No change.

(k) There is no change since last report, except that a slaughter-house has been erected.

(l) During the winter of 1905 the old brick Lazaretto belonging to the Municipality collapsed, and when the Small-pox broke out in December, 1905, the Municipality had to get permission from the Indwe Company to put the cases in their tin shanty; this, at present, is the only accommodation available for cases of infectious diseases, and is totally inadequate.

(m) Enteric.—During the summers of 1904 and 1905 a considerable number of cases of Enteric Fever occurred in the town and District, but as these outbreaks have already been fully dealt with in special reports issued by me, it is unnecessary to again deal with them.

Diphtheria. In July, 1904, an epidemic of Diphtheria occurred on Mr. Grey's farm at Ndonga. When I visited the farm I found that five children had already died from the disease. I recommended that the four children then suffering from the disease and the contacts should be injected with anti-diphtheritic serum, but it was nine days after my report before authority was granted for this urgent and necessary procedure.

In September, 1904 a slight epidemic of Diphtheria occurred on the farm Stillfontein, but with the necessary precautions it soon ceased.

Small-pox.—In April, 1905, one case occurred in Guba, and seven on the farm Perskerplaats, but with the usual precautions the epidemic did not spread.

In December, 1905, an epidemic occurred at Byrne Mine, one woman and four children being affected; the woman died, but the children got better; these cases were not reported early enough, and consequently some of the contacts were roaming about the town and location, with the result that one boy in the town and one woman in the location developed the disease. These were all the cases that occurred up to the end of the year.

Measles.—During the Winter of 1905 a severe epidemic of Measles occurred in the town and District, many of the cases being complicated by Pneumonia. I believe there were a number of fatal cases in the country, but there were only three in town.

86. WOODSTOCK.

(i) WOODSTOCK.

DR. JAMES MACKENZIE, ACTING DISTRICT SURGEON.

(a) The water-supply remains as in previous years, insufficient in quantity, although good in quality, being obtained from the Newlands Springs, and conveyed by mains and leadings to the various houses.

Woodstock is fairly well provided for, but Maitland has many dwellings without water-supply, and which have to obtain their supply from wells, mostly surface wells, and in many cases contaminated with soakage.

In the event of a long drought during the summer months, the whole of the District would be in a state of water famine, which is serious to contemplate in a community of 40,000 souls, and I trust the efforts being made to arrive at some sure and plentiful supply of water will not be delayed.

(b) This, in the case of Woodstock, is discharged into street gutterings, and collected in various collecting channels, and discharged into the sea.

Woodstock is at present laying out a comprehensive storm-water system, which will do much to lessen the evils of having the streets lined on two sides by open running sewers.

Night-soil.—This is worked departmentally in Woodstock by an excellent system of regular and systematic removal under close supervision.

Overcrowding.—This has been closely watched, and during the eighteen months few prosecutions have been required in Woodstock or Maitland.

(c) Slaughter-houses, Bakeries, etc.—These, both in Woodstock and Maitland, are under close supervision. Slaughtering is prohibited in Woodstock.

Several prosecutions have taken place as a result of meat being exposed for sale unfit for human consumption.

Dairies at Maitland have all been inspected, and any alterations suggested have been carried out before licences have been granted.

Public abattoirs are much required.

Cemeteries are closed in my District, but the Maitland and Mowbray cemeteries contiguous are well kept.

Nuisances have been promptly dealt with by the Local Authorities by means of their Sanitary Departments. The Woodstock Sanitary Staff is well worked and excellently organised. Maitland has two Sanitary Inspectors to daily inspect and report all nuisances.

(d) Isolation Hospital.—Maitland and Woodstock Municipalities have no special Isolation Hospital, but, by a yearly payment towards the Cape Town Isolation Hospital, have means of isolating any infectious cases.

Zymotic Diseases have not been prevalent during the eighteen months. Typhoid Fever has shown a marked decrease. Measles has been prevalent but of a mild type.

Whooping Cough was prevalent during the early part of 1905, but was of a short duration type.

Summary.—Much has, and is being done, by the Local Authority to maintain and improve the health of my District by well organised Sanitary Officers under an Advising Medical Officer of Health.

(ii) SUB-DISTRICT OF DURBANVILLE.

DR. L. F. BICCARD, ADDITIONAL DISTRICT SURGEON.

(a) The water-supply during the past two years has been plentiful, and in no instance has any case of illness been traced to pollution within the Municipal area. During the year 1904 an outbreak of Typhoid at Bellville was traced to a polluted spring, which had become contaminated by the deposit of manure along the main roads; this was attended to by the Divisional Council, who had the spring filled up and a stop put to the stinking manure being thrown along the sides of the public thoroughfares.

(b) Nil.

(c) Night-soil is removed at least once a week by the Municipal carts and buried at a suitable spot outside the village.

Slop-water, with the exception of the hotels, from which it is removed by the Municipal van, is thrown into back gardens.

Household and other refuse are collected and removed weekly.

(d) No instances of overcrowding or buildings unfit for human habitation exist within the Municipality; there are, however, instances of such, within the Divisional Council area, which should receive the attention of their Inspector.

(e) Slaughter-houses, butcheries and bakeries are all well kept under supervision of the Council's Inspector.

(f) The sale, storage and preparation of human food are also under the eye of the Council's Inspector.

(g) Cattle, swine and other animals are still allowed to run loose in a thickly populated area like Bellville, which is bound to be detrimental to the public health.

(h) and (k) Nil.

(i) The burial grounds are both well kept.

(l) The only Hospital accommodation is a small two-roomed galvanised building, belonging to the Municipality, and set aside in the event of an outbreak of Small-pox.

(m) Enteric has not shown itself to any marked extent in this District. During 1904 it broke out in three or four families at Bellville, and in each case the disease was traced to the water, which was at once seen to by the Divisional Council. Towards the close of 1905 a whole family was infected on a farm beyond the village of Philadelphia.

Within the Municipal area no case of Small-pox occurred, and only one sporadic case of Typhoid was reported during the two years; two cases of Diphtheria were reported, in the latter infection was traced to the first case.

During the year 1904 Small-pox broke out on the farm Mosselbank where four cases were reported and removed to Rentzkies farm; all these cases, one male and three females, were unvaccinated; the contacts were vaccinated and quarantined on the farm; the infection was traced to a Drakenstein case.

During 1905 the disease broke out at Stikland, near Bellville, from where three cases were removed to Rentzkies farm; the contacts were vaccinated and quarantined at home. During the same period one case was discovered at the farm Plattkloof—this was a contact of the Stikland cases. The source of infection of the Stikland cases was traced to the Stellenbosch Division.

Measles appeared in several parts of the District, but not in a very virulent form; its effect on the mortality was very small, as I am only aware of three or four deaths due to the disease.

Two cases of Scurvy were treated in the Lock-up during 1905.

87. WORCESTER.

DR. D. HUGO, DISTRICT SURGEON.

(a) The water-supply needs no special comment as circumstances remain much the same as obtained during the periods covered by previous reports, excepting that pollution is infinitely worse. The options obtained for the supply of pure water have not yet been availed of, much to the inconvenience and disappointment of the inhabitants.

(b), (c) and (d) No alteration since last report.

(e) The management of slaughter-houses, butcheries and dairies requires better supervision, and I recommend that inspections be carried out periodically, not so much with a view to prosecuting offenders, but as an object lesson, and as a means to instruct the various proprietors as to what the hygienic requirements are in order to maintain the health standard. I have entered more particularly into this question in my report as Health Officer.

(f), (g), (h), (i), (k) and (l) No alterations since last report, excepting that the Contagious Diseases Hospital in this town has, on strong local representation, not been closed. Much benefit is derived from this establishment, especially at the present time, when there appears to be a considerable increase of Syphilitic affections—particularly of the highly contagious condylomatous type.

(m) No alteration since my last report. There has been a marked decrease of Enteric Fever and Gastro intestinal affections, due, no doubt, to a plentiful supply of water during the last three months of the year 1905. In 1904 the epidemics were severe, accounting for a considerably higher death-rate. I have referred to this in my report as Health Officer, to which I beg to direct attention.

In my usual vaccination tour, I have again experienced the difficulty of persuading railway employés to turn up for operation. I beg to refer to my special report concerning this matter, which was sent to the Medical Officer of Health for the Colony.*

As regards the Lymph supplied, I think I am safe in saying that it has been universally satisfactory.

88. WYNBERG.

(i) WYNBERG.

DR. H. CLAUDE WRIGHT, DISTRICT SURGEON.

As there has been practically little difference between the state of the public health for the last two years, I have thought fit to combine my remarks and consider them *seriatim*, as enquired for under the Circular Letter on the subject, No. 67 of 1905.

(a) Water-supply.—There has been no alteration in the source of supply, but an increased amount, added by the new works of the District Waterworks Company, supplying Claremont, Newlands, and part of Kenilworth. The supply is of the same satisfactory nature as it always has been.

(b) The sewerage system on the septic tank principle has been adopted for Wynberg and is working very satisfactorily. Up to date about 700 houses have been connected. In time the the pail system will be almost superseded except in isolated instances. In Claremont and Newlands the old system is still in vogue and is worked on as satisfactory a footing as is possible as such a condition of things will allow. A change to some water-carried scheme is very desirable.

(c) The collection of slop-water is continued as heretofore with the exception of those houses which have connected with the drainage works.

(d) Overcrowding is on the increase, accounted for by "bad times." This must be the case, as, unless a large number of the population has left, the empty houses and shops testify to that fact.

(e) Slaughter-houses and butcheries are kept in a much cleaner condition than in former years, competition amongst the butchers accounting for a more cleanly condition of things. Dairies leave much to be desired—bakeries are well kept.

(f) I cannot state much about the storage and preparation of human food, but I advise none to eat cream or milk cheeses—*tantum sufficit*.

* Matter has been brought to the notice of the Railway Department.

(g) Cattle and swine are not kept to any large extent in the District, but some of the horse dealers have large stocks of horses and mules within the Municipality. The localities are anything but pleasant to live in. The kraals become a deep quagmire after rain and should be kept under much stricter surveillance. The Municipality in this respect has certainly been very lax. The horses are kept in kraals in the centre of the town, the drainage of which percolates and overflows all round amongst the near dwellings. There is always an amount of sickness amongst those connected with them, and Diphtheria has been very prevalent. This condition has been brought to the notice of the Council without much avail, if any.

(i) No change regarding cemeteries.

(k) Abatement of nuisances has been dealt with under (g).

(l) and (m) No Infectious Hospital exists, but cases of Enteric are admitted to the local general Hospital. Cases of Small-pox are sent to Rentzkies' Farm as soon as discovered. Diphtheria is treated in the patient's home in a more or less satisfactory manner according to the intelligence of the occupier. Measles has not been prevalent. The few cases of Small-pox that have occurred have been promptly dealt with by the Divisional and Municipal Councils, and the disease has not spread. Vaccination has been carried on throughout the District by qualified and lay vaccinators. I consider the nomadic Indian and Kafir labourers should be better watched and registered and kept on the pass system. This may be asking too much from a political view, but certainly not too much from an economical or health point. The Calf Lymph, supplied by the Government Laboratory, has been excellent, if used freshly. There have been no cases of Bubonic Plague, Scurvy Epidemic Pneumonia, and the like.

SUB-DISTRICTS OF RONDEBOSCH AND MOWBRAY.

DR. S. B. SYFRET, ADDITIONAL DISTRICT SURGEON.

There has certainly been much less sickness than in previous years. This I do not attribute to improvement in sanitary matters but to the fact that it has been a healthy year.

(a) The new reservoir on the slopes of Table Mountain has been finished. The supply is nevertheless barely sufficient for the present population in the dry season of the year. A larger supply is, I think, imperative in the near future. Contamination of water is most likely to occur in the tanks of those houses supplied on the dribble system.

West London has no proper water-supply. The inhabitants obtain their water from shallow wells, around which night-soil and household refuse are often deposited.

(b) The Municipality of Mowbray has lately put down several large underground drains to carry bath-water, etc., and storm-water into the Liesbeek. In my opinion these drains are insufficiently or improperly ventilated, as at several spots an abominable stench arises from them. I have noticed this particularly at the railway crossings at Durban Road, Mowbray, and at Wernsch Road, Observatory, and at the junction of Broad and Main Roads, Mowbray.

(c) This, I think, is carried out as efficiently as possible under the circumstances.

(d), (e), (f), (g), (h) and (i) No change.

(k) I beg to draw attention again to the state of the Liesbeek River. It can only be described as an open sewer. In summer the odour arising from it is at times very bad. It receives practically the whole of the drainage of Rondebosch and Mowbray, and part of that of Claremont. Until we have a proper drainage system, I suppose the present state of affairs must continue, but the Municipalities ought to be made to keep the river fairly clean.

(l) There is no Infectious Diseases Hospital in this District. One is badly wanted. At present there is no provision at all for cases of Diphtheria, Scarletina and Measles. The General Hospitals will not admit them, and in many cases it is almost impossible to treat them efficiently in their homes. This applies most especially to cases of Diphtheria.

(m) There has been no outbreak of infectious disease in this District. There have been some isolated cases of Typhoid and Diphtheria, but not nearly so many as in previous years. There have been fewer cases of Measles than in previous years. This is a disease which should be notified. It is especially fatal among Coloured children.

NATIVE TERRITORIES.

1. TEMBULAND, TRANSKEI, AND PONDOLAND.

(i) ELLIOT.

DR. M. PURCELL, DISTRICT SURGEON.

(a) With regard to the water-supply, I have only to add to my previous reports that matters are worse, far worse, the number of Typhoid cases alone will show this; and as I am not the only Doctor in the place there are doubtless more cases that have not come under my observation. From a sanitary point of view, during the present year the township may conveniently be divided into east and west. The eastern portion, to which may be added the Native Location, gets its water-supply chiefly from the river, which has been flowing in a strong stream during the year owing to abundant rains. Up to the present there are no Fever cases at that side of the town. On the west side the supply is chiefly derived from shallow wells, being further away from the river. It is on the west side all the Fever cases are. Each house has its accompanying shallow well more correctly described as a cess-pool, from which all supplies are drawn. If measures could be taken to close down these wells wholesale it would be indeed a blessing. The only remedy that suggests itself to me is either the building of a reservoir with connecting pipes or else a number of deep wells properly constructed, so that there would be no possibility of having them contaminated from the surface water.

(b) As before.

(c) The night-soil is carried away from the town, but is frequently left exposed in pits which are not properly covered, so that it makes its presence felt for hundreds of yards in its neighbourhood.

(d) No change.

(e) There are three butchers' shops, all fairly well kept. Cattle are slaughtered close to the river and higher up than the drift, which represents a line through the centre of the village. All cattle, etc., should be slaughtered below the drift.

(f) and (g) As before.

(h) and (i) The Native Cemetery has been moved to a more suitable site. The location is fairly well kept.

(k) No change.

(l) No Hospital accommodation is provided.

(m) Typhoid Fever.—The total number I attended from July, 1904, to December, 1905, amounted to seven cases. It continued from June into July; then there was a break until October, 1904. In January and February, 1905, there were three cases in the village. After that I have no record until September, when it started afresh, and is still going on. There was one death. All cases were European. There were nine cases of Diphtheria amongst the European population. All recovered. I attended three cases of Lobar Pneumonia. Influenza was prevalent and assumed various forms. Measles started in September, 1905, and continued up to February 25, 1906. It was carried here by travelling showmen from Barkly East. Personally I can record no deaths. It followed the usual moderate course in children, but in the middle aged and those past the prime of life it was very severe, attended by severe Bronchitis, or in some cases Broncho-Pneumonia, and followed by Cardiac weakness and general debility, with very slow recovery.

There was no Small-pox, vaccination, Plague or Scurvy, with the exception of a couple of Natives who brought the latter disease from the Natal mines.

(ii) ELLIOTDALE.

DR. ALBERT DAVID, DISTRICT SURGEON.

(a) Most of the inhabitants use rain water collected in galvanised iron tanks; when these, during the dry season of the Winter, fail, all depend on the water of the Xora, which is fairly clean. If the population of the place should increase, bathing above the place where the water is taken out of the river would have to be forbidden.

(b) Nil.

(c) Some houses have open pits, others, like the Gaol, use buckets which get regularly emptied into small pits which are then filled up.

(d), (e), (f) and (g) Nil.

(h) The huts of the Elliotdale Police Camp are in a very bad state, both from a sanitary and aesthetic point of view. They are half tumbled down, not properly thatched, and infested with bugs and other vermin. It is high time that the camp got removed to some other place.

(i) In the survey of the place a piece of ground was measured out as a burial-ground, which seems to fulfil the necessary conditions.

(k) Nil.

(l) No Hospital whatever exists in the District. There is no accommodation whatever in gaol for prisoners suffering from an infectious disease. The necessity of building at least a few huts near the gaol for this purpose has in former years been repeatedly pointed out by me, but without result.

(m) In both years Measles appeared in the District during the months of June and July. In 1905 the mortality of children from Pneumonia, complicating Measles, was very great. It is impossible to give numbers, as the registration of deaths here is still very inaccurate. In one ward more children died of Measles during the month of August than the Headman reported deaths for the whole quarter.

One isolated case of Small-pox and one of Enteric were seen during 1905. In both the source of the disease remained undiscovered.

During the months of November and December, 1905, a general vaccination of the District was carried out. 22,537 people were vaccinated at a total cost of £99 12s. The lymph used was very good, and as far as I could ascertain primary vaccinations were successful.

Tuberculosis in all its manifestations is increasing to an alarming extent. I believe it would be a good plan, as the Natives believe very much in anything printed, to distribute among them pamphlets with instructions about precautions to be observed by consumptives. At present the only literature sown broadcast among them is Dr. Williams! This great humanitarian not only sends to every headman bundles of pamphlets, together with a medal with his likeness, to be worn on their coats, but he has his commercial travellers who go personally to every ward and tell the people about the benefits to be derived from the use of his pills.

Syphilis, too, is on the increase, but I believe it is propagated just as much by the promiscuous use of pipes and drinking utensils as in the intercourse of the sexes. Treatment of this disease is at present very insufficient, as the Natives do not see the necessity for a regular cure. As soon as the worst symptoms disappear they stay away and generally are not seen again until the tertiary stage arrives. A gratis supply of medicines would go a long way towards inducing them to continue the cure the necessary length of time.

(iii) ENGCOCO.

DR. JOHN W. WEIR, DISTRICT SURGEON.

The health of the district of Engcobo for the year 1904 was good. During the first three or four months of the year there was a considerable number of cases of Diarrhoea, Simple Continued Fever, and Influenza, but no epidemic. The number of deaths registered was 428. Arranged according to age they were one year and under, 93; up to five years, 64; up to twenty-five years, 91; up to sixty years, 114; over sixty years, 66. On the 16th July a case of Small-pox was discovered in a traveller near the Idutywa border of the district. He had come from Cofimvaba and had been moving about through various districts, so that the source of the disease could not be traced. He was isolated and the kraal was disinfected, and the disease did not spread. Another case appeared on the 18th November in a Native Cape Policeman who had caught the disease while inspecting huts in his district, and had come to this district on duty. Vaccination and disinfection were carried out, and no other case presented itself. As Small-pox was appearing in Natal and elsewhere it was considered necessary to vaccinate throughout the District. This was done at fourteen centres, the numbers vaccinated being 2,012. The lymph used was obtained from the Grahamstown Institute, and was found to be invariably good. Two cases of leprosy were certified.

The health of the District for the year 1905 was very good. The number of deaths registered was 351 or 77 less than the previous year. Arranged according to their ages the numbers were: One year and under, 65; one year up to five years, 77; five years to twenty-one years, 51; twenty-one years up to sixty years, 108;

sixty years and over, 70. In the months of November and December, Small-pox appeared in four localities; all in children in a mild form, without any deaths. In the case of one child the corner of one eye was affected, causing an albugo. Vaccination was carried out at these four places, and at eight other centres, the total numbers vaccinated being 3,221. Five cases of Leprosy were certified. The sanitation of the village is at present fairly good. An open furrow runs through, which is liable to pollution by slops and refuse. The furrow is led out of a stream which runs past the village and from which pure water may be obtained should the rain water in the tanks fail. The rainfall for the year was above the average, viz.: January, 1.72 inches; February, 6.87; March, 3.49; April, 6.24; May, 2.96; June, 1.12; July, 0.25; August, 0.60; September, 2.54; October, 2.78; November, 2.69; December, 6.40. Total, 37.66 inches. There is a great improvement in the cleanliness and sanitation of the gaol since the arrival of the new Gaoler. The latrine pails are kept scrupulously clean and regularly emptied in pits some distance away.

(iv) MQANDULI.

DR. P. H. WALKER, DISTRICT SURGEON.

(a) The village has to depend on the river for most of its water, and as that is apt to become offensive from decaying vegetable matter during drought, a more wholesome water-supply is desirable.

(b) and (c) Nil.

(d) The Gaol is the only dwelling which is at times overcrowded and insanitary. Occasionally as many as twenty-four adult Natives have been shut up for the night in one of the male cells. Each man then had 141 cubic feet of air space, and his share of ventilation would be five square inches. The stench on opening the door in the morning can be imagined. Asthma is much more frequent among Natives than among Europeans; and to shut up an asthmatic prisoner for twelve hours in such an atmosphere is absolutely inhuman.

(e), (f), and (g) There is no nuisance to report.

(h), (i), and (k) Nil.

(l) There is still no Hospital accommodation of any kind, although the District rate amounts to about £4,200 per annum. I have urged without effect that this and every District Council should erect (by open contract) some cheap galvanised sheds at each Magistracy for the reception of sick Natives and their friends when coming for treatment by the District Surgeon. It is absurd to propose that the medical wants of the Native in the district immediately around Umtata (about 200,000 people) can be adequately met by the well-equipped but tiny Cottage Hospital in Umtata. The Natives as a whole will never make much progress until the population increases to such an extent that all male adults have to work in order to live. At present, for most of them the chief object in life is to drink Kaffir beer. It is certain also that the population will not increase to any extent so long as the Kaffir witch-doctor and quack doctor are not suppressed. As there is no registration of births and deaths it is difficult to arrive at any distinct notion of the mortality. But if hut tax brings in about £3,400 a year that implies some 6,800 wives, and if even half the bearing children at the rate of one every two years there should be an annual addition to the population of about 1,700—amounting to about 22,000 in thirteen years. By the previous Census the population was about 31,000, and by the last Census only 36,000. So that apparently its annual increase of births over deaths is under 400, and consequently the death-rate must be, if not 30 per cent., at least something enormous.

(m) Whooping Cough has been spreading through the District for some months. Dysentery has been epidemic here and there during the last two years. Constantly recurring Influenza epidemics and their sequelæ have caused considerable loss of life; but the chief mortality is due to intestinal and respiratory diseases among young children who fall victims to pernicious Kaffir customs.

(v) PORT ST. JOHN.

The condition of the village under headings (a), (b), (c), (d), (e), (f), (g), (h), (i), (k), (l) and (m) remains as it has been in past years, and the comments passed on previous occasions are equally applicable now.

(l) Attention is again directed to the absence of any form of Hospital accommodation or an Isolation Camp for the treatment of infectious disease.

(m) On the 3rd July, 1904, a Native male adult was found in a moribund con-

dition on the main road close to the landing shed. He had been landed the previous evening by steamer from East London, and being too ill to proceed had spent the night under a wagon close to the shed. He died within an hour, the *post-mortem* revealing an early Typhoid condition. The usual disinfecting processes were carefully attended to both ashore and on board; there were no other cases.

Both Measles and Whooping Cough are seen each year in epidemic form, and that is practically all that can be said about it. Cases are only seen some considerable time after the onset, so that the origin of infection becomes untraceable. It is impossible by means of present methods to estimate the mortality from these epidemics, as the Natives do not always see the necessity for reporting the deaths of children, but from what one can learn incidentally, the annual death-rate is very high. For the first seven weeks of 1906 twenty-one deaths have been reported as being due to Whooping Cough in locations close by, though twice that number would probably be a more correct estimate.

There have been no cases of Small-pox and no vaccinations.

On the 13th December, 1905, a Native child was seen whose symptoms and history pointed strongly to Small-pox. On closer investigation the case proved to be one of Scabies, the whole District being eventually found to be infected. The disease, according to Native accounts, has prevailed for more than a year, and has attacked practically every individual in the District, and as one might have expected, shows an increased activity during the hot weather. A universal system of dipping with some coal-tar preparation, modelled on the plan in use for sheep and cattle, would tend to the gradual extermination of this pest.

On the 7th December, 1904, a Native male adult from the Kentani District was examined and certified as suffering from Tubercular Leprosy.

The general health of the community has been excellent, local affections being practically confined to the presence of tape-worm and the *Ascaris Lumbricoides*.

So far the District has escaped infection by the *Bilharzia Hæmatobia*, though evidence continues to come to hand to show that this parasite is making steady advances in the surrounding Districts, more particularly in Eastern Pondoland.

(vi) ST. MARK'S.

DR. WM. O. R. ARNOT, DISTRICT SURGEON.

(a) The main water-supply to the village of Cofimvaba, the seat of Magistracy, is still an open water-furrow, which remains unflagged, muddy, and exposed to pollution by horses, cattle, pigs, sheep, dogs, and in fact any animal that may be passing through, or roaming at large. The furrow water, owing to above pollution, is used only for gardens and washing, while rain-water caught in iron tanks is used for drinking and culinary purposes. There is no Local Authority, with the exception of the Resident Magistrate who occasionally gets the furrow cleaned by prison labour, but who, of course, can do nothing towards getting the furrow flagged and protected from the inroads of animals.

(b) Sewerage and Drainage.—Nil.

(c) A few of the householders have sanitary buckets which are emptied once a week by paid prison labour, but the majority, including the two local hotel proprietors, have the ordinary dug-out privies which are likely to be a source of danger in the future. Slop-water, household and other refuse are thrown into dung-pits and used later on as manure for gardens.

(d) Only one place, a so-called coffee-shop in the middle of the village, might be considered overcrowded and unfit for human habitation.

(e) All satisfactory.

(f) Satisfactory.

(g) There are two kraals in the village, one being just above the main street; this should not be allowed.

(h) There is no Native Location properly so-called, with the exception of the Native Police Camp, which is well out of the village and well conducted.

(i) Well laid out and managed.

(k) No nuisances to speak of.

(l) Nil.

(m) There were six outbreaks of Small-pox during 1904. At Nigilas Ward, on March 8; Fafantwenie, on April 4; Mlambi's, on April 6; Nombewu's, on July 9; Falo's, on July 15; and Sturman's, on September 19, the last case being discharged at Sturman's on October 31. All the above outbreaks appear to have been due to a visitor from some infected part. There were thirty-two cases in all, one proving severe, and ultimately fatal. The rest of the cases were of a decidedly mild type. No Europeans were infected. All outbreaks were managed by Headmen

and the District Surgeon under instructions from the Resident Magistrate. Each infected kraal was quarantined for a month or six weeks and all the infected area vaccinated, while all in the neighbourhood of such areas were vaccinated by the District Surgeon at the nearest store. After the disease had been suppressed, the quarantine was raised, the huts and clothing of patients being first fumigated. All that could possibly be done under the circumstances to suppress and prevent the spread of the disease was carried out. 740 people were vaccinated during the year, and of these a large percentage appear to have "taken."

The expense incurred by Government in connection with Small-pox during 1904 was £44 8s., this sum including vaccination and the quarantining and visiting infected areas.

No Bubonic cases appeared in the District. Measles was very prevalent in this District and the Territories generally for some months. It was of a rather virulent type, and caused several deaths.

Towards the end of 1904 Scurvy began to show itself among the Natives, and was very severe in many cases. The Scurvy was probably due to the bad grain season, which resulted in semi-starvation among the Natives and want of variety in diet.

With regard to the year 1905, in January and February, Scurvy was still marked among the Natives of the District, but was easily combated by suitable treatment and changes in diet. There were nine outbreaks of Small-pox during the year beginning in Dlakana's Ward on March 8; in Dlagamandla's, on April 7; Mpafa's Kraal, June 13; Banfiso's Ward, July 5; Tyesi's Ward, July 12; Tabete's Ward, July 21; Nombewu's Ward, September 26; renewed in Tshete's Ward, October 3; and again in Banfiso's Ward on November 17; the last case of all being discharged on December 25, 1905. There were sixteen cases in all with only one death, the latter being a man who had just returned from Cape Town, where he had been at work. The outbreaks of Small-pox and vaccination were managed as in 1904. 3,364 in all were vaccinated by the District Surgeon during the year, and the total expenditure by Government for both vaccination and Small-pox inspection was £100 3s. 6d.

(vii) UMTATA.

DR. R. H. WELSH, DISTRICT SURGEON.

(a) to (l) Under these headings there is nothing special to report, as there has been practically no change during the last two years beyond calling for tenders for various services, *e.g.*, removal of slops, lighting of the town, and procuring a water-supply. As yet there has been no practical result. The old cemetery is becoming full, and a new one is being arranged for.

(m) During 1904 and 1905 there has been no Small-pox in this District. There was one case of Diphtheria in the first half of the year 1904, and this was fully dealt with in my report for the half-year ending 30th June, 1904. During 1905 there was one case of Enteric Fever and one of Scarlet Fever dealt with. Both recovered and there was no spreading of the disease; the source of infection could not be traced. Both were Europeans living in the town and the necessary steps for isolation were taken by the Municipal Council.

In the latter part of 1904 a very general epidemic of Measles prevailed; there were many serious cases and complications were common, especially lung complications. It is impossible to say what proportion of deaths there were, as there are no reliable statistics to go on, but amongst the Native population it was very high, three and four in a family being not uncommon. The disease was of course not so fatal amongst Europeans, where the patients are better cared for, but I knew of one case where a mother and child both died from Pneumonia occurring as a complication of Measles.

There has been no Bubonic Plague. Scurvy has not been bad, nor has epidemic Pneumonia. *Post-mortem* examinations were held on two instances where death was due to taking Cooper's Dip. Its poisonous properties are now well known to the Natives, and the fact that it can be readily obtained, and taken or administered with ease, will lead to its being frequently used for suicidal or homicidal purposes, if more stringent regulations with regard to its sale are not put in force.

(viii) XALANGA.

DR. P. L. CRAISTER, DISTRICT SURGEON.

The health of this District has not been so good as one could have wished, neither in the village of Cala itself nor the District as a whole. In the village we have had several cases of Scarlet Fever, but all have recovered, the cases being of

a mild form. There have also been several cases of Typhoid Fever in the village, one or more deaths occurring. The case of a European male was at first diagnosed as Diphtheria, but bacteriological examination gave negative results later on; Typhoid was clearly defined. In the District at large there have been in 1904—of which year I am now writing—many cases of Typhoid with several deaths (in one family two), but as Natives do not always send to us, no definite estimate can be made of the numbers. Scarlatina has been very prevalent among the Native children. I have been credibly informed that Whooping Cough with Broncho-Pneumonia has been very prevalent among Natives outside the village; from both these diseases there have been deaths usually the result of want of thought and of ignorance. As showing the unwillingness of the Natives to bring their Lepers forward, I had in June, 1904, a very advanced case giving forth an offensive discharge which, he said, “had been going on for months,” so he was a live distributor of bacillus lepri. Syphilis in this year has been more frequent than last. My notes call to mind two cases of young girls with “sore lip, tubercle of the tongue, neck and throat and of the vagina, with various condylomata.”

At the beginning of 1905 a flutter arose on the report of two plague contacts having come in the district; an examination, speedy isolation and the disinfecting was all prevention needed, and so it ended. One of our Native Police came in January and said he had been bitten by a “spinnerkop”; he could not describe the insect, but his arm was much inflamed, and he was ill for some time. I have previously seen other cases. During the early part of the year we had a sharp and serious epidemic of Diphtheria in one family, there were three deaths, making a clean sweep. The chief epidemic however was the dreaded Small-pox, which made its appearance among the Natives on the Indwe River border of the Colony; there were five cases and one death, a man, as usual, unvaccinated. I am sorry to have to again draw attention to the terrible Tuberculosis. To my mind it gets worse year by year. It attacks young men and young girls, and carries off a goodly proportion by death. I would suggest as a contributing cause close confinement of the young “teacher” in schools which might be better ventilated and built; in every such case I say “No more school” to my patients.

There have been this year an unusual number of deaths by lightning during the very heavy thunderstorms.

Some time ago a query was put to the District Surgeons for information as to a new form of disease among Natives—swollen limbs and other signs of debility. After very careful inquiry I can only find this to occur among men who have worked in the gold mines; in former times it was not known by our old Natives; they gave the same cause, “wet mine working.” The categorical answers as to the township of Cala are the same as before, with one grand exception, that the Municipality has at last established a water scheme. Water is now stored in a kloof by a cement stone weir; from this clear supply the water is brought all over the town by two-inch iron pipes with a supply pipe of three-quarter inch terminal; the pressure is so great that a stream or jet of water can be sent over the highest building in the town—a very great boon in case of fire! There are eight miles of piping now down, and the supply is 300,000 gallons per day or about two-thirds of that in a drought. Standards, with turncocks, are placed in various parts of the town for public use. This is a great boon, as it is no longer needful for our people to drink out of the furrow which is now contentedly left entirely to the pigs and ducks.

(iv) BUTTERWORTH.

DR. C. PERCY BLIGH-WALL, DISTRICT SURGEON.

(a) The water-supply of the village remains inadequate, the inhabitants drawing their supply from rain water tanks, and when these fail, from the river usually taking it from points below the greater part of the village, and so using tainted water.

The Hospital and Gaol depend upon a similar water-supply. During the year 1905 a 2,000 gallon rainwater tank was added at the Hospital, and the supply is thereby greatly improved. There is no bathroom in the Gaol.

Recommendations for improvement of Gaol water-supply:

1. The provision of suitable Pasteur or Berkefeld filters and a regulation requiring all drinking-water to be passed through the filter before use.
2. The annual cleaning out and lime or cement washing of all rain water tanks.
3. Either (a) the erection of a windmill pump upon the river bank with intake above the village, or (b) the erection of rainwater tanks of sufficient capacity to provide a minimum of seven gallons per diem for each prisoner

and prison guard for a period of at least ninety days. The average number of inhabitants is about twelve, and therefore on this basis a capacity of 7,560 gallons would be required.

4. The erection of a bathroom.

A few private individuals drew their water-supply from windmill pumps on the river; there are now five such pumps supplying ten households.

(b) There is no system of sewerage or drainage.

(c) Night-soil is removed at least once a month by a contractor. Slopwater is supposed to be removed to heaps without the village where household and other refuse is deposited.

(d) This matter is in the hands of the Municipality who have framed bye-laws. Certain Native coffee shops do not appear to be in a very sanitary condition.

(e) No regulations appear to be in force, and slaughtering takes place even in the public streets!

(f) No system of meat inspection is carried out; diseased meat is from time to time exposed for sale upon the public market.

(g) There are cattle kraals and mule yards within the village.

(h) Satisfactory.

(i) The cemetery is in a disgraceful condition, and there is no Burial Board; during 1905, however, a Board was elected, but its appointment has not yet been confirmed by Government, and consequently matters remain as before.

(k) With the exception of slaughtering being allowed on private premises and in the public streets, matters appear to be in a satisfactory condition.

(l) There is no Hospital for infectious diseases, and this is urgently needed as stated in my last report.

(m) 1904.—A somewhat severe outbreak of Measles took place in the village during September and October; no deaths were reported. This outbreak gradually died down. The surrounding District was also affected, and there was a considerable number of deaths among the Natives. No Small-pox reported.

1905.—The outbreak of Measles gradually died away in the District; there were but two cases within the Municipal area.

One case of Diphtheria reported in the township, recovery took place.

One case of Typhoid on the Railway Works, a European, who died; the probable source of infection was a pool of dirty water by the roadside, from which he took his drinking-water.

No Small-pox was reported.

The Municipality enforce the notification of infectious diseases within the Municipal area, outside that area the Resident Magistrate attends to the matter, and in both cases infectious diseases have been combated as promptly and efficiently as possible. Four cases of Syphilis were treated under the Contagious Diseases Act during 1904, and six cases during 1905.

No vaccination has been performed during these years.

There has been the usual number of Scurvy cases returning from work in the Colony and elsewhere, a fair number of these cases came from Cape Town, where the probable source of infection appears to have been tainted meat sold cheap to the labourers. A few cases took place on the Railway Works in the District, but quickly yielded to isolation and change of diet.

(x) IDUTYWA.

DR. C. ARMSTRONG LUMLEY, DISTRICT SURGEON.

The past year has been characterised by a greater rainfall than many previous years, and is considered by old residents to be a nearer approach to the summer climate of seasons eight or ten years ago. The result is an improved appearance of the country and heavier crops to be reaped by the Natives. The latter point is not an unmixed blessing since it carries in its train greater drunkenness owing to the brewing of larger amounts of Kaffir beer; and the heavy mealie crops, by providing ample food without labour, result in increased idleness and a total disinclination to work on the part of the Native.

Little remains to be added to the reports of previous years under the headings (a) to (m).

I have noticed in connection with (e) that in the meat supplied by the local butchers the presence of caseating and even suppurating glands is of unpleasant frequency and leads one to believe that the total lack of supervision in this respect is not without its disadvantages.

(f) There are a number of bakers in the village; the work is generally done by a Native, and the bread is almost invariably sour. It is disposed of in large quantities to the Natives, who apparently have no objection to this feature; but to the European palate it is distinctly a drawback. This is presumably the reason why nearly all households bake their own bread.

(m) There has been no Small-pox, and I have seen little of other infectious diseases with the marked exception of Whooping Cough.

During the months of April, May, and June this existed so widely and severely that it must have been responsible for an immense infant mortality, how great it is of course impossible to estimate, but one trader told me that in the District immediately around him, the young children had all been carried off with it and that in the kraals no small children were any longer seen.

In July the epidemic terminated almost suddenly.

Whooping Cough, being a condition which needs careful nursing, always has a great mortality among Natives, to whom the rudiments of nursing are quite unknown. It is a common sight to see a child bathed in a profuse perspiration, after a paroxysm of coughing, sitting naked on the veldt exposed to any cold wind that may be blowing.

(xi) KENTANI.

DR. W. GIRDWOOD, DISTRICT SURGEON.

(a) The water-supply of the village has been improved since my last report; a well has been dug and fenced in, and a suitable water for domestic purposes is now supplied to the villagers.

This has been the result of representations made to the Local Authority after an outbreak of Enteric in the village.

(b) None exist. Natural conditions assist these.

(c) As in former report the bucket system is the one in vogue in the village. Night-soil is usually buried and generally at a safe distance from the house.

(d) The only overcrowding that exists in the village occurs at the gaol, which is much too small for the demands made on it at times.

(e), (f), (g), (h), and (k) call for no special comment.

(i) A cemetery has been selected and a situation found, but I have not yet been asked to examine and report on the site, so am not in a position to state whether it is suitable.

(l) There is no local Hospital nor any provision for the isolation of disease.

Enteric Fever appeared among the white population of the village in August, 1904. The origin of the outbreak was probably due to carelessness in disposal of night-soil. Both the cases recovered.

Whooping Cough has been specially bad during the winter of 1905, and the mortality amongst the Natives high. It spread to the village, and most of the European children caught the disease. The epidemic was a severe one and pulmonary complications were the rule. One European infant aged one month succumbed to the disease.

Measles has not been more prevalent than in former years.

Small-pox has not visited this District since November, 1903. General vaccination was carried out and completed towards the end of 1904. 10,704 persons were vaccinated at a total cost of £131 16s. It is impossible to estimate the amount of success attending the operation, but from enquiries made it appears to have been generally successful.

There have been fewer cases of Leprosy reported during 1905. This is not because the disease is less prevalent, but because the Native Headmen are particularly lax about reporting these cases.

A few cases of Scurvy from the labour centres have been treated.

There has been no epidemic of Pneumonia.

(xii) NQAMAKWE.

DR. JOHN STRUTHIERS, DISTRICT SURGEON.

(a) The water-supply to the village is neither pure nor sufficient, due to neglect. No improvement is possible without the formation of a Village Management Board.

(b) Sewerage and Drainage.—No system exists.

(c) No nuisance in these respects exists.

(d) and (e) None exist at present.

- (f) Need not be dealt with.
- (g) Few swine or cattle are kept in the village, and these are cared for in a satisfactory manner.
- (h) None exist.
- (i) The new local cemetery is sufficient for the needs of the village and neighbourhood.

(k) The inhabitants have no grievance in this matter. The Resident Magistrate acts as Local Authority.

(l) No Hospital exists.

(m) This District has been remarkably free from infectious disease for the past two years. Localised outbreaks of Enteric Fever, Dysentery, and Measles have occurred. Measles was very prevalent among Native population in 1904. An outbreak of Measles occurred in this village towards the end of 1905.

No Small-pox has been reported during the whole period covered by this report.

The death-rate must have been high amongst Native children during 1904, due to Measles and Whooping Cough.

No vaccination in a systematic or general way has been undertaken during these two years. Sporadic cases of Scoury are continually met with, such cases are labourers from the centres of work. Two cases have occurred in the local gaol.

(viii) TSOMO.

DR. J. VICTOR HARTLEY, DISTRICT SURGEON.

In the early part of 1904 the village was surveyed, and theerven sold by Government. The result is seen in the building improvements, etc., made during the latter part of 1904 and during 1905. During this period the new gaol was completed; it is a fine, commodious block of stone buildings. The removal of the gaol quarters allowed the much needed improvements in the Public Offices. The rains in February, 1905, came too late for the crops, and in this district, especially in the Kei Hills, no crops were sown or reaped, and there was great privation among the Natives in consequence. However, this summer, 1905-1906, the outlook is a very promising one throughout the District.

(a) Water-supplies, etc.—The majority of householders conserve a certain quantity of rain water in tanks, and use it chiefly for drinking purposes. This supply has to rely on the rainfall, which is very uncertain. The other sources of water for household purposes are the (1) Tsomo River, (2) Lolwana Stream (viz., Congwa's Spring and Stride's Spring), (3) the borehole in the Residency grounds.

(1) The Tsomo River is a perennial stream and is not seriously affected by the severe droughts. During the winter and spring months the water is clear and good, the flooded state of the river in the summer and autumn renders the water unfit for use. Unfortunately the river lies at a much lower level than the village, and the difficulty of carriage arises.

(2) The Lolwana Stream is a stream three miles long, having several good springs in its bed, and empties itself into the Tsomo below the village. Congwa's Spring is much fouled by cattle and Natives, so that during drought seasons the water is bad, and cannot be used for household purposes. An examination on February 15, 1906, gave the result:—

(1) Colour in 6-inch column, bluish tinge; Turbidity, clear. (2) Odour, faint, peaty. (3) Residue left on evaporation, white, faint charring on ignition. (4) Free Ammonia, reaction obscured by Turbidity produced. (5) Chlorine, about 5 grains per gallon; equivalent of NaCl, about 8 grains per gallon. (6) Nitrites, none. (7) Nitrates, faint trace. (8) Hardness, about 14°, much magnesia. (9) Lead, zinc, iron, copper, none. (10) Oxygen absorbed in 15 min. at 212° F., about .35 grains per gallon.

(3) Stride's Spring.—This is less exposed to pollution than Congwa's Spring. Result of examination 15th February, 1906:—

(1) Colour in 6-inch column, clear; Turbidity, clear. (2) Odour, none. (3) Residue left on evaporation, whitish residue, no charring. (4) Free Ammonia; Reaction obscured by Turbidity produced. (5) Chlorine, about 7 grains per gallon; equivalent of NaCl, about 12 grains per gallon. (6) Nitrites and Nitrates, none. (7) Hardness, about 16°, much magnesia. (8) Lead, zinc, iron, copper, none. (10) Oxygen absorbed in 15 min. at 212° F., about .2 grains per gallon.

The Borehole in the Residency Grounds.—This water is obtained by means of manual pumping; a sample examined on February 15, 1906, will show how unsuited it is for household purposes;

(1) Colour in 6-inch column, clear; Turbidity, none. (2) Odour, none. (3) Residue left on evaporation, slight white, no charring. (4) Free Ammonia, no trace, turbidity. (5) Chlorine, about 15 grains per gallon; equivalent of NaCl, about 25 grains per gallon. (6) Nitrites and Nitrates, none. (7) Hardness, about 22°, much magnesia. (8) Lead, zinc, iron, copper, none. (9) Oxygen absorbed in 15 min. at 212° F., about 15 grains per gallon.

Some precautions should be taken to protect the two springs mentioned from pollution. The water from the bore-hole is of little use by reason of its extreme hardness, though this water is used by the gaol, supplemented by water from the Tsomo River, where the stream is clear. Stringent measures should be taken to prevent Natives bathing or washing clothes where it will pollute the sources of water discussed, *i.e.*, above them.

(b) Sewerage, etc.—No scheme in force. Surface Drainage.—The steep gradient of the village allows the water to drain off rapidly.

(c) Disposal of Nightsoil, etc.—Efforts are being made to get householders to adopt a uniform system—dry bucket system—with a regular means of attending to them, and having them emptied at the depository used by the gaol to the north of the village. There is great need of a public latrine for Natives attending the Resident Magistrate's office, etc., as they use places such as the quarry to the extent of making a nuisance. No provision is yet made for dealing with household refuse.

(d) Overcrowded Dwellings, and Dwellings unfit for Habitation.—The school hut is a sod rondavel, and is too small for the number of children attending daily. There are no sanitary conveniences provided, the children using the quarry. This is a grave position which I hope will be shortly remedied. One property has been reported to the Resident Magistrate as unfit for occupation.

(e) Management of Butcheries, etc.—There is no butcher. Each occupier kills on his own allotment for his own requirements. There is one baker's licence; everything is kept satisfactorily.

(f) Sale, Storage of Human Food, etc.—No food is stocked beyond the immediate requirements.

(g) Keeping of Cattle, etc.—A few are kept in the village at night for domestic use. They are not a nuisance.

(h) The Order, etc., of any Native Location, etc.—The Native Police Camp is situate in the village below the gaol. I would suggest its removal to the south side of the Lolwana Stream, below Ntloko's Kraal. It is kept clean. There is no location, domestic servants remaining on their master's premises at night.

(i) Cemeteries, etc.—There is a Native burial-ground (fenced) between the Mission Reserve and the village. The place surveyed for the European cemetery is in a very unsuitable position, being situate on the bank of the river above the village. I would advise, before any burials take place, that the position be reconsidered; a suitable site could be selected between the village and the Mission Reserve.

(k) Abatement of Nuisances.—This has not been considered yet, no bye-laws existing.

(l) Hospital Accommodation for Infectious Diseases, etc.—No accommodation provided.

(m) Presence, etc., of Infectious Disease.—Enteric Fever.—This disease is prevalent to a slight extent among the Natives. Two cases have occurred in Europeans. One, early in 1904, contracted the disease in East London. The other occurred in October, 1904, in the village, the source of infection, in my opinion, being due to tainted water-supply during the drought. Both recovered, and no further spread occurred.

Diphtheria.—In 1904, cases, nil. In June, 1905, two cases; European children; no source of infection traced; both recovered; quarantine was carefully observed. No further cases occurred.

Small-pox.—An outbreak occurred in the Mbulu Ward in July, 1905. There were four cases, all unvaccinated Natives, three children and one adult. Quarantine was observed. The schools at Pattison, Mbulu, Mfula, and Mbulukweza were closed until September 11, 1905. No further cases. The source was evidently an infected Native passing, who stayed the night at one of the infected huts.

Scurvy.—This disease occurred in the local gaol in December, 1904; there were several cases. It disappeared in January, 1905; no further cases. The health of the prisoners in the new gaol is very good. Scurvy occurs frequently in this District; it is my experience that it is often in Natives who have just arrived home from the mines, etc.

Plague, Epidemic Pneumonia.—No cases. No precautions taken. Rats are a general nuisance.

Measles.—In 1904 there was a general epidemic throughout this District during the months from July to December. The mortality among Natives was very high, both from Measles and pulmonary complications. In some measure this was due to the ignorance of Natives in nursing matters. There was a very large proportion of cases of Otorrhœa and Cancrum Oris following this epidemic. An unfortunate thing was the schools were not closed, and so aided the spread of the disease materially. A large number of Europeans (both adults and children) were attacked, but no fatal issues.

In 1905 there was a slight outbreak in Ngolosa Ward, but nothing to comment on. There have been two bad cases in Europeans in December, but both recovered. The Natives generally have been free this year.

Phthisis.—This disease is rapidly on the increase in this District, especially in two wards, Lutuli and Qutsa. It is attacking young adults who have not been away from home. This question cannot be too seriously considered, for one case in a hut now generally means that two or three people contract it by living in the hut. In one case a man came back from work and died shortly afterwards; his wife and child, also his mother, all previously healthy, came to me within two months, the two adults far advanced in Phthisis, the child commencing. The adults died within a few weeks. I strongly urged that the hut be burnt down, fortunately the relatives listened and so the disease was stopped in this instance. I believe the above is being repeated daily amongst us. Prophylaxis is very difficult under the conditions these Natives live, especially the overcrowding in small huts at night, the promiscuous spitting about, the woeful ignorance of the Native in all hygienic matters, *i.e.*, clothing, etc.

The cases of Surgical Tuberculosis are very rapidly on the increase, specially spinal caries, tubercular necroses, glands, etc. I would suggest some elementary instruction in schools regarding spitting about, clothing, etc.

Leprosy.—Several cases have been certified during the two years.

Syphilis.—There are a few cases, who come for voluntary treatment.

Vaccination.—A vaccination tour took place in April, May, and June, 1905, when 8,719 Natives submitted. The total cost being £59 15s. 6d. The result cannot be ascertained, though all cases I saw afterwards I found were generally successful. The Natives still are not vaccinated sufficiently, especially in the wilder parts of the District.

Registration of Births and Deaths.—This, as shown by the figures, is not satisfactory. The population is estimated over 20,000.

Births.	1904.	1905.
European	3	10
Native	171	164
Deaths.	1904.	1905.
European	1 (apoplexy)	Nil
Native	292	198
Post-Mortems	4	7

This shows a decrease in the population. I fear the figures do not give an accurate idea of the population.

The causes of death are misleading, as the Native generally includes all diseases accompanied by a temperature, *i.e.* (Pneumonia, Phthisis, etc.), under the general name "fever," and so on.

Cause of Death.	1904.	1905.
Stomach complaints	23	21
Cough	4	Nil.
Fever	173	98
Consumption	23	24
Dysentery	35	28
Influenza	12	4
Whooping Cough	4	1
Inflammation of lungs	4	3
Old age debility	6	7
Paralysis	1	1
Measles	2	Nil.
Deformity	Nil.	1
Asthma	2	1
Diarrhœa	Nil.	2

Heart Disease	Nil.	1
Convulsions	Nil.	4
Tumour of throat	1	1
Tumour of arm	Nil.	1
Tumour of chest	1	Nil.
Tumour of stomach	Nil.	1

The fallacy of the above list can be shown by referring to Measles—only two deaths being recorded during the severe epidemic in 1904.

(xiv) WILLOWVALE.

DR. A. LANG KNAPMAN, DISTRICT SURGEON.

(a) The inhabitants depend chiefly upon tank water for their requirements, also from a spring in the neighbourhood, which even in times of severe drought has never failed. It is liable to pollution from various sources, a condition of affairs which might be easily remedied at very small cost by having it fenced.

(b) None exist.

(c) Left to the discretion of the individual.

(d) to (h) Nil.

(i) The cemetery is well situated. The management being vested in a "Board of Trustees."

(k) Nil.

(l) None exist.

(m) There have been no cases of Enteric Fever, Diphtheria or Small-pox during the last two years.

A severe outbreak of Measles occurred during the months of August, September and October of the preceding year, the mortality amongst Native children being high, the result in most cases of Pulmonary complications. About the same time Whooping Cough was very prevalent.

Owing to the Native habits and customs, young children stand very little chance in epidemics of this nature, and even in older children these outbreaks are responsible, in my opinion, for the large number of cases of Pulmonary Tubercle which has come under my notice.

Most European children in the District suffered from one or other of these epidemics, but recovered, the disease running its usual course.

Chicken-pox was also prevalent during the early months of the year, a few cases being severe; the majority, of a mild type, caused little or no inconvenience.

Influenza, of a mild form, was also prevalent.

A vaccination tour was completed during the year, thirteen centres being visited. The total number of persons vaccinated was 5,977. As only one visit was made to each centre, I am not in a position to give accurate information as to the results.

Every Headman was instructed to report, and invariably the reply was "The arms are swelling." From information gleaned in this way, and from other sources, I came to the conclusion that the result were most satisfactory.

Three cases of Scurvy came under observation in 1904. None came under my notice during 1905.

Three natives (two males and one female) were examined and certified as lepers during the year 1904, and one male Native certified as a leper in 1905.

The health of the Gaol inmates during the years 1904-1905 has been most satisfactory. There have been no cases of Scurvy, the ailments being of a trivial nature.

(xv) BIZANA.

DR. G. B. THOMPSON, DISTRICT SURGEON.

From this District there is little to report. There have been no notable outbreaks of disease. In 1904 a servant of the Inspector of Schools brought Small-pox into the District. Fortunately, I observed him at my own place of residence, and he was at once isolated in a tent outside the village on the Commonage, and there watched by a guard. Immediate vaccination of Europeans and Natives in the village and around the village was performed, and there was no spread of the disease. The "boy" had been infected while sleeping in an infected place at

Umziukulu. There has been no public vaccination of the District during these years, only of prisoners in the Gaol and of those as above stated.

One case of Leprosy has come under my observation a woman—and up till now she remains amongst her people.

In 1904 twenty-seven cases of Syphilis were treated under the Contagious Diseases Act, of whom seven were released from treatment as cured, two (children) died and one absconded to Johannesburg uncured. There is great need for a small Hospital for these people. All stay at home, and I fear that much of the medicine supplied is not used effectively. I think the most of these people are grateful for what is done for them, and on the whole appear with regularity at the appointed time. Some have to come a very long way, which, in bad weather, is an undoubted hardship, to which a Hospital would put an end.

In 1905 nineteen were treated under the Contagious Diseases Act, of whom nine were released cured, two removed from the District uncured, and one (an infant) died. Undoubtedly these figures do not represent anything like the degree of the prevalence of the disease. If Headmen knew that the disease was one which required to be dealt with and reported cases, many more would be known, as certain affected persons, men especially, must, owing to the customs of the people, sow the disease broadcast. One case came under my notice, where it was reported to me that a Syphilitic man, unable to gratify his lusts in his own neighbourhood, owing to the women getting knowledge of his state, went far away to the sea-side, where he was unknown, there to continue his abominable ways. Both of his wives and two of his children were on the Government list of patients. Of this man it was stated amongst his tribe that had the Government not been in possession of the country he would have been a dead man.

(a) No alteration from former years. More water-tanks have been built by private individuals, but the obnoxious water-furrow still remains the main supply for many; no alteration of the Native Police Camp has been made. It remains where it was just above the water-furrow.

(b) No sewers. Drainage natural.

(c) None undertaken.

(d) None examined.

(e) A Native coffee-shop has been opened close to a public road, and my attention has been called to a public nuisance caused by entrails, etc., of slaughtered pigs being left rotting and corrupting the air around. No regulations are in force regarding such matters.

(f) Nothing to report.

(g) Kept everywhere. One European pigsty was placed right at the boundary of a piece of ground next the public road, and so offensive was the effluvium that, to avoid it, persons had to keep at a distance or hurry past.

(h), (i), and (k) Nil.

(l) None. Even Contagious Diseases have to be treated amongst prisoners mixed up with others in a two-celled Gaol.

(m) See above.

The cost of dealing with the one case of Small-pox in 1904 was borne by Government.

Scurvy, in mild form, is not unusual here. It has come under my notice in Gaol and outside.

(xvi) FLAGSTAFF.

DR. JOHN C. PALMER, DISTRICT SURGEON.

I have little to add to my former reports of the general health of this District. In spite of rough-and-ready methods no disease has come under my notice as being due to any sanitary deficiencies. The abundant sunshine, the equable climate, proceeding to neither extreme, and the purity of the air, are the factors to which this happy state of things is to be attributed.

Only two deaths have been recorded amongst the white inhabitants, one due to a lamentable accident. The second was due to Gastric complaint, incidental to young childhood. No cases of Small-pox or Fever have been reported, though a special visit was made by me to an outlying kraal to inspect a suspected case.

Rainfall has been abundant, and up to the average. The following points I proceed with seriatim:—

(a), (b) and (c) No change to that stated in previous reports.

(d) None exist.

(f) No remarks called for.

(g) A mild attack of horse-sickness occurred in the winter of 1905, but soon passed off. A rather severe outbreak of Lung Disease, from which a number of cattle in the village died, occurred at the end of 1905.

(h) No change.

(i) In rather a dilapidated condition, but is going to be attended to by the trustees.

(k) If no advance, no retrogression in this respect.

(l) None exist.

(m) One case of Diphtheria, the patient, a child, succumbing to the complaint, occurred at a neighbouring trading station.

No Small-pox or Typhoid Fever cases have arisen.

No vaccinations have been done.

(xvii) LIBODE.

DR. R. ALLEYN BOWEN, DISTRICT SURGEON.

(a) The water-supply of the village is derived partly from the river and partly from rainwater caught in tanks. The tank water is excellent, but the river water, on which the community depends during the dry season, is quite unfit for drinking purposes unless it is boiled. I have already pointed out in my last report that this state of things could be remedied with the assistance of Government.

(b) There is no drainage scheme.

(c) Bucket closets and cesspits are the ordinary methods used in the disposal of night-soil, etc.

(d) There are no overcrowded dwellings. Many, however, are open to improvement from the point of view of human comfort.

(e) These trades seem to be carried on in a satisfactory manner.

(f) Nothing to find fault with.

(g) No nuisance is created by cattle or swine in the village.

(h) The only Native camp in the neighbourhood of the village is the Police Camp, which is kept in an orderly condition.

(i) None.

(k) There were no complaints as regards nuisances generally.

(l) There is no Hospital accommodation of any kind. Even in the Gaol prisoners affected with infectious disease cannot be isolated.

(m) I inspected and reported on three cases of Enteric Fever in Lingatu's Location on March 24th, 1904. Enteric and Dysentery is endemic among the Natives, it is rarely reported by the Headmen, nor are the diseases unduly severe in type. On the 20th July, 1904, a case of Small-pox occurred in Lingatu's Location. This was that of a visitor from Umzimkulu, who had evidently contracted the disease before leaving his home. Recovery took place. I vaccinated the people who resided in the kraal, and the Resident Magistrate issued instructions regarding the isolation of contact. No fresh cases were reported. The total cost to Government was £4 8s. 3d.

No cases of Small-pox were reported during 1905. There are, however, a great number of unvaccinated Natives in the District, and should the disease be introduced it would be very likely to spread. I understand that a general vaccination of the District is now under consideration. Scurvy is not very prevalent, perhaps owing to the large supply of Kafir beer.

(xviii) NGQELENI.

DR. J. N. BLACK, DISTRICT SURGEON.

(a) The water-supply of the village is entirely dependent on the rain-water collected in tanks by each householder.

(b) Nil.

(c) Buckets are used for night-soil and are emptied weekly by the prisoners and buried on the Commonage at some distance from the village.

Slop-water, etc., are thrown indiscriminately in the grounds of each individual householder.

(d) Nil.

(e) There are no slaughter-houses, and animals are slaughtered in owners' private premises, and there has been no cause for complaint.

(f) Nil.

(g) Cattle, swine and other animals are kept in private kraals, and only in one instance do I consider a kraal too near the dwelling-house.

(h) The Police Camp is kept in good order.

(i), (k), and (l) Nil.

(m) During 1905 there was a slight outbreak of Measles among the Native children, in the outlying parts of the District, and, from what I gathered, several cases proved fatal from exposure to cold.

Whooping Cough was also prevalent amongst the Natives. A few cases also occurred in the village.

Public vaccination was performed at six centres during 1904, as appointed by the Resident Magistrate, 4,965 having availed themselves of it. I cannot say definitely whether in all cases it was successful, but in visiting several centres later, I found that the vast majority had been so.

Consumption is fairly rife amongst the Natives.

Leprosy is still prevalent in the District, two or three cases having been reported lately, and, which I believe, I am to be officially sent to examine and report on.

I may mention that the *Bilharzia Hæmatobia* abounds in the smaller rivers of the District, and both children and adults among the Natives are considerably affected by it.

(xix) TABANKULU.

DR. D. VIRTUE TEBBS, DISTRICT SURGEON.

I resumed duty as District Surgeon of Tabankulu in April, 1905. In reporting on the health of the District for the past year, it is only possible to do so in very general terms. The European population is very small, but healthy. Only a small proportion of the Native population seeks medical aid. The fact of there having been no resident doctor available for nearly seven years has made them rely on their own devices, fostered the continuation of Native practices and the idea of witchcraft as a source of their troubles, so that, excepting for a few Native schools in the upper part of the District, and a few more advanced Basutos in the same quarter, it is chiefly long-standing complaints, and then often the irremediable results of that are brought to one's notice.

I would suggest a periodical visit, say once a month, to some centre in the lower part of the District to familiarise them with better methods and results.

(a) In the village of Tabankulu the water-supply is derived from rain water and from springs three to four miles from the village. It is conveyed by an open furrow exposed to continual drainage, with consequent failure, and pollution from the horses, stock, and animals on the commonage, and continued by an open sluice down both sides of the main street of the village, the drainage of which it receives. This is used for drinking and culinary, besides garden purposes.

The supply is fairly adequate, but could be much increased and made more constant by the expenditure of a few pounds, and a periodical weekly inspection to repair leakage and damage.

(b) No sewerage or drainage exists.

(c) Depends altogether on the ideas of the inhabitants.

(d) There is no overcrowding. Some dilapidated huts exist, but as they are for the most part untenanted, are an eyesore only. The C.M.R. Camp, which has for some time been a discredit to the village, and unfit for occupation, has been in part repaired. Part of it is still unfit for habitation.

(e) and (f) are under no supervision.

(g) Kraals exist in the village area, but are not "a nuisance."

(h) Does not apply here.

(i) The cemetery and burial-ground are about one mile from the village, in a suitable position.

(k) Nothing to note.

(l) No accommodation for dealing with infectious disease exists. A hut, formerly used as a post office, is in use for the reception of serious cases (injury, etc.).

(m) No outbreak of Small-pox, Enteric Fever, or Diphtheria has come to my notice. Measles was prevalent in the upper part of the District during the winter months and spring, and took its toll in mortality among the children. It is quite impossible to trace the number affected. It seems to have spread from the Mount Frere side of the District in August last in the direction of the main road. There

was also an epidemic of Pneumonia of a very fatal kind in November of last year, which, from cases I had under observation and the complications occurring, I took to be due to an Influenza. Those under treatment did well. Under instructions from the Resident Magistrate, I visited one kraal, where four deaths among adults occurred within a week. In the same kraal I visited two other cases of Lobar-Pneumonia, which recovered.

Vaccination was last undertaken in the District some eighteen months ago, but owing to bad weather and various causes, the attendance was very small. Previously to that it had not been carried out (for, I believe, the first time) in this District for five years. Suggestions are being made by the Magistrate for a partial re-vaccination of the District during 1906, when, with due notice being given through the Headmen, the attendance should be large.

No cases have been brought to my notice under the Contagious Diseases Act of 1885.

Syphilis is very prevalent among the Natives, especially among the Basuto population. It is very rare, however, to see primary manifestations, or even cases during the infective stage, though examined for. It is generally long-standing tertiary lesions which are brought to one's notice.

I have examined and reported five cases of Leprosy in the District—all of old-standing cases, though of slight nature and in a quiescent stage. In these cases I find the maculae tend to disappear under treatment. Other cases, unreported, I believe exist in the District.

No imported cases of Plague have been observed in this District.

(xx) LUSIKISIKI.

DR. CHARLES DUDLEY COOPER, DISTRICT SURGEON.

(a) The water-supply is conveyed by open furrow to the township. Originally pure at its source, the water becomes grossly contaminated during its distribution, and during the dry weather it is evil-smelling, discoloured and contains organic matter.

Attempts are made from time to time to clean out portions of the furrows, but as nearly every prisoner is drafted off as soon as possible after conviction, no labour is available for a proper systematic cleansing of the furrows.

The water-supply, therefore, remains a standing menace to the public health.

I am glad to be able to report that my suggestions, as to the water-supply of the C.M.R. Camp, have been carried out, and that no fresh cases of Hæmaturia, due to the Bilharzia Hæmatobia, have been brought to my notice.

(b) There is no system of sewerage or drainage.

(c) In some few instances buckets are used for night-soil, but the majority of householders rely upon cess-pools.

(d) There is no overcrowding, neither are there any dwellings unfit for human habitation.

(e) The butcheries and bakeries are clean and properly kept.

(f) These are all conducted in a proper manner.

(g) A few head of cattle are kept in the village, but not near any dwelling place. A large number of sheep are kraaled in an inhabited erf in the middle of the village, which, I think, is undesirable.

(h) The general sanitation of the Native Locations appears to me to be well conducted.

(i) The cemetery, which is situated two miles from the village, is in good order.

(k) The most serious of these is the condition of the water-furrows. If these could be cleansed out thoroughly, say twice a year, the water-supply would be as good as any in the country, but I do not see how this can be done, unless prisoners are occasionally retained for the work.

The other nuisances indicated above are capable of being very easily remedied.

(l) There is no Hospital for the accommodation of cases of infectious disease, nor do I think one necessary.

A much greater want would be supplied by the erection of a small Casualty Ward. Cases of fracture of the skull, etc., are often brought into the village from a long distance, and there is no place where they can be properly treated on their arrival. Such a Hospital could easily be made self-supporting.

(m) A Native male pre-vaccinated adult admitted to the Gaol on October 6th, 1905, was found to be suffering from discrete Small-pox. The source of the infection could not be discovered as he had been wandering from kraal to kraal for some days previous to his arrest, presumably with the idea of eluding the Police.

With the authority of the Acting Resident Magistrate, I proceeded to the kraal, where it was known that the prisoner had last slept, and vaccinated all the inhabitants. The Gaol Staff and the prisoners were also vaccinated.

In all cases that I had the opportunity of seeing later vaccination was successful. The prisoner was isolated in a tent outside the Gaol-yard. He made an uninterrupted recovery, and was discharged on October 31st, 1905, twenty-six days after his admission.

No other cases of Small-pox have been discovered.

As the patient was a prisoner awaiting trial, no extra cost was incurred.

No public vaccination has been performed in this District for some years.

2. GRIQUALAND.

(i) KOKSTAD.

DR. ARTHUR J. H. THORNTON, DISTRICT SURGEON.

(a) No alteration has been made in the source and condition of water-supply since last report. The furrows in the township have been more systematically attended to, however, and in many streets have been reinforced with mason work.

(b), (c), and (d) No alteration.

(e) No complaints have been made nor have any cases of disease been traced to want of cleanliness and general sanitation of slaughter-houses, butcheries, dairies, bakeries, etc.

(f) and (g) No alteration to report.

(h) No such Location or Camp for Natives exists within the control of the local authority.

(i) No alteration.

(k) The Street-keeper and Sanitary Inspector has such within his control, and, where necessary, reports to me as Borough Medical Officer. It has not so far been necessary to take legal action for the remedy of such nuisance.

(l) No such Hospital exists. Cases of Enteric Fever, where home conditions are unsuitable, are usually removed to the East Griqualand and Usher Memorial Hospital, which is a General Hospital.

(m) During 1904 a few cases of Enteric Fever, Diphtheria and Small-pox were dealt with. All the cases of Enteric Fever, six in number, one Coloured and five Europeans, occurred singly. Two were imported into the District from Natal, and for the other four the cause could not be assigned. The disease appears sporadically during the Autumn. Two cases of Diphtheria—both Europeans—occurred, and were probably due to deficient ventilation under the houses concerned.

Of Small-pox twenty-one cases—all Coloured—were dealt with. The total cost in dealing therewith was £33 11s. 2d. by the Municipal Council, and £141 15s. by the Government.

During 1905 infectious diseases have not prevailed to any great extent, with the exception of Enteric Fever, of which thirteen cases were notified from January to May, 1905. The exciting cause was not manifest, but after the dry season set in no further cases occurred. Of Diphtheria two cases were reported, both recovering under the use of Antitoxin. One case only of Small-pox was discovered during the year, this was at the farm Kruisfontein, on the 7th November, 1905, the affected person being a Kafir boy, pre-vaccinated, who contracted the disease in the Umzimkulu District. No further cases occurred, the subject being isolated, and the servants and residents on the farm being vaccinated and re-vaccinated. The total cost to the Government in dealing with the outbreak was £9.

General.—One hundred and sixty-one deaths were registered during the year. Nineteen Europeans, giving a death-rate of 11·6 per 1,000, and 142 Natives a death-rate of 13·2 per 1,000. Of these six Europeans were infants under one year or 15 per 100 births, and 61 Coloured were infants under one year or 21·9 per 100 births. The births were Europeans, 40; Coloured, 278.

(ii) MACLEAR.

DR. J. H. WHITE, DISTRICT SURGEON.

The health of the District has been exceptionally good during the eighteen months under report. The remarks made under (a) to (l) in my last report express the present condition of affairs.

There have been two mild cases of Scarlet Fever (white) in the village of Maclear, both belonging to the same family. The cause of these I attribute to the insanitary condition of the yard adjoining the house. One case of Diphtheria occurred in Ugie, and ended fatally, the cause being the same as in the above cases.

Two Lepers have been examined, and sent on to the Asylum.

There have been no cases of Measles, Small-pox, Bubonic Plague, or Enteric.

(iii) MATATIELE.

DR. C. ERNEST POPE, DISTRICT SURGEON.

(a) to (l) Same as previous report.

(m) There has been one case of Enteric Fever since June, 1904, in the town amongst Europeans and four cases amongst Natives, all of whom were females, that have come under my observation. All of these occurred in the south-western corner of the town, and the infection was no doubt introduced by a Native from outside. It is quite time the Town Council were given powers to deal with diseases of this nature, as there is no doubt that Enteric is increasing, and many cases occur amongst Natives which are never reported. Every effort was made privately by the free use of disinfectants and advice to prevent any further spread of the disease, but unfortunately the year 1906 has commenced with the worst outbreak of Enteric the town has ever known.

There was one outbreak of Small-pox in Alexander's Location, which was discovered after the disease had worked its way out. It was introduced by a Native from Natal four or five months before 28th November, 1904, when I went out to report. On the same date a fresh case was discovered at the farm Hillside, which was traced to its origin at Majedeni's Kraal in Alexander's Location. This case was isolated, and all the people at the farm were vaccinated, with the result that there were no fresh cases.

The Native Locations are a constant source from which epidemics of all kinds flow all over the Colony. Whooping Cough, Measles, Enteric, and Small-pox are everlastingly on the ebb and flow. Information as to their existence leaks out by accident, and then nothing effectual can be done to prevent their spread, for want of "powers" to deal legally with the cases as they arise.

Natives are no longer in the condition in which they can be "bounced" into doing anything they are not naturally inclined to, and they have already discovered that there is no "law" whereby they can be compelled to observe any directions that may be given as to the keeping of quarantine and disinfection of clothing, excreta, and huts, and attention to directions.

(iv) MOUNT AYLIF.

DR. W. P. NICOL, DISTRICT SURGEON.

(a) No alteration.

(b) None.

(c) In this connection something useful might be done with the aid of prison labour. I would suggest that it be made compulsory for every householder to make a monthly payment, in return for which the prisoners from the local gaol should remove all night-soil and household rubbish on certain days and deposit same in a place where it could be burnt.

(d) The question of dwellings at once calls to mind those buildings which belong to the Government, and have been in existence for a considerable number of years.

In discussing the question as to whether any given building is fit for human habitation, much depends on the standard of fitness which is set up. The main points of importance are undoubtedly situation, ventilation, and light.

The house which the Resident Magistrate rents from the Government has been dealt with in a special report, which was forwarded to the Public Works Department. The Public Offices are little short of scandalous from a sanitary point of view. Small, badly lighted, with low roofs, they are often unbearable for those whose misfortune it is to have to work in them.

It must be remembered that while it may be urged against a report of this nature that no one has been known to have a serious illness directly traceable to the building, and that many officials have come and gone, and are still working in the Public Service, yet the effects of a bad building are often slow and insidious in their action. Complaints of headaches, aching eyes, and various ill feelings are too frequent, and can undoubtedly be put down to the buildings.

*Another building requiring notice is the Public School. This is a hut built of sods, and having a thatched roof. In length it is about eighteen feet and in breadth about fourteen. It is very badly lighted. In this hut a teacher and about thirteen children spend several hours of each day.

These are facts which speak for themselves. The community apparently is content, but in this case at least the Government has good reason for interference. The closing of the present building and the withdrawal of monetary aid until a suitable school building shall have been guaranteed would probably have the desired effect.

(e) No fresh remarks.

(f) No remarks.

(g) Swine should not be allowed to be kept within the bounds of the village on any account.

(h), (i), (k), (l) No fresh remarks.

(m) Enteric.—No case occurred among the European inhabitants during 1905. In 1904 there was one well marked case (a shop assistant), the origin of which could not be traced. It ended in recovery. As will be seen from previous reports, it is most unusual for twelve months to elapse without at least one case occurring in our small population. It is practically impossible to discover the cause, and it is certainly not comforting, in view of the possible increase in size and importance of this place.

There is no doubt that cases occur sporadically among the Natives, and it is quite possible that we must look to this fact to explain cases amongst the Europeans. Some years ago I performed a *post mortem* on a Native whose dead body was found not far from the village, and discovered the cause of death to be a most severe form of Enteric.

Diphtheria.—None.

Small-pox.—Two very slight epidemics occurred, one in 1904 and one in 1905.

In 1904 a case occurred at the Endakeni, in this District, a male Native, previously vaccinated. The kraal was put in quarantine, and vaccination was performed both at this kraal and the surrounding ones. This case was traceable to the Umzimkulu District. The disease did not spread.

In 1905, also at the Endakeni, there were two cases, one a male and the other a female, neither previously vaccinated. Extensive vaccination was performed, and there were no more cases. There is no doubt that in some ways things are ordered wisely, and the fondness of the authorities for vaccination even in "hard times" is not without its reward. In my opinion (confined certainly to two Districts), the Kafirs are well vaccinated, and it is difficult to imagine a really serious epidemic of Small-pox just now. It has often occurred to me that some way could be devised by which the Native children could be vaccinated soon after birth, so as to avoid the accumulation of a large number of unvaccinated infants during the intervals between general vaccinations. In a small District, such as this, it would not be impossible for all children to be brought up and vaccinated within three months of birth.

Contagious Diseases Act, Part II.—Hitherto this Act has not been much employed in this District. Now, however, the disease Syphilis is making itself more noticeable, and it will be necessary to call in the help of the Resident Magistrate, who can best explain the Act to the various Chiefs and Headmen.

Measles.—During 1905 an epidemic of Measles started in the southern part of the District, and worked its way from end to end. So serious have been its effects that the Natives will have reason to remember "this rinderpest among the children" for many years to come. In response to numerous complaints made at the Office, I was instructed to go out and investigate, and see what could be done. On my tour I saw a good number of cases actually suffering from Measles, and came to the conclusion that the disease itself, in so far as it was manifested by rash and fever, was severe, though not more so than many epidemics among Europeans.

The most striking thing, however, was the horrible cough from which nearly every child was suffering. Acute Bronchitis and Broncho-pneumonia were the two great destroyers of life. It was pitiful to see the children suffering as they did, through no fault of their own, but partly from their surroundings (dwellings, weather, etc.), and even more from the ignorance of their parents.

The climate in these parts is a treacherous one, owing to the rapidity with which the weather passes from extreme heat to comparative cold. Even the Europeans who take precautions on this account suffer extremely from Catarrh. The Native children, however, stand no chance. A healthy child or infant has perhaps been

* This matter has been brought to the notice of the Education Department.

carried for a few hours on its mother's back in the heat of the day, literally bathed in sweat, and is then taken off and put on the ground, probably naked, and exposed to the East wind, which has meanwhile sprung up, bringing with it the damp mist. Under these conditions a child with fever can hardly be expected to escape.

At sixteen kraals which I visited personally I was able to collect eighty-seven cases of Measles, with sixteen deaths, and with a total of fifty-four kraals where the number of cases could not be ascertained there were fifty-seven deaths. From these figures, applying only to a comparatively small number of kraals, some idea of the serious nature of the epidemic may be gathered, though it is, of course, quite impossible to get at the percentage of deaths to cases.

Moving about amongst the Natives brought very forcibly to mind another question of no small importance, namely, the relationship existing between the European doctor and the Kafir race and its health. It would seem that the medical man has work to do among the Natives which is never dreamed of by the Government, which pays him for attending the gaol, ministering to the medical needs of paupers and police, and cutting up dead bodies. He has, in fact, an important missionary (purely medical) work to do, for which it is practically impossible to get adequate remuneration from the Kafirs. Although he cannot look to the Government to pay for all this work, he can claim some support in the way of salary, and indirectly in other ways. From one year's end to another a medical man is struggling to drive into the Native's head the elementary laws of health: to impress upon them some idea as to how to take care of the sick, both young and old, and he is confronted by ignorance, carelessness, a love for patent medicines among the educated (?), a firmly-rooted belief in witchcraft and the Kafir doctor.

Some of these obstacles time alone will remove, but in two cases the Government can and ought to help in the interests of Public Health.

Of patent medicines I have spoken in previous reports. The remedy is simple. A list of the ingredients printed, compulsorily, on every bottle would kill 90 per cent. of them, and most medical men would willingly prescribe the other 10 per cent.

As for the Kafir doctor, all that can be asked is that he shall remain as he is now, unrecognised by the law, an unlicensed person. That he is an evil and both directly and indirectly causes many deaths is not to be, in fact, cannot be, disputed. All that can be said in his favour is that, considering his profound ignorance, he sometimes does well. He sets bones at times well (with the maximum of suffering to the patient), and he has drugs which will purge and cause vomiting and even death in a few minutes.

Of all the absurd, unhealthy, and retrograde suggestions ever made (made though it was officially, from the best motives and a love of the Kafir) was the suggestion to license Native herbalists.

Scurvy.—No cases of Scurvy have been seen or reported, nor have I come across any cases such as were described in a circular from the Medical Officer of Health for the Colony.

Dysentery.—This disease in a very severe form occurs throughout the District every year. It is considered by some to be due to the large quantities of green mealies eaten when first the season begins, but this can only apply at one time in the year.

As a matter of fact, the disease is always here, and becomes epidemic at certain seasons. From my own observations, it is clear that the disease is carried from person to person in the same kraal. I have on several occasions seen children with Dysentery run out and deposit their stools within a few feet of the hut door.

In conclusion, I would wish to draw attention to a matter which affects the welfare of only a small section of the community—the Europeans living in the village. It is the presence in the township of Kafirs and Coloured people holding land and living on it. From all other points of view, except that of health, their presence is utterly to be condemned, and as affecting the health of the Europeans, it is a constant source of danger.

(v) MOUNT FLETCHER.

DR. M. RICONO, DISTRICT SURGEON.

The health of the District during the years 1904 and 1905 has, on the whole, been fairly satisfactory.

(a) The water-supply from the bore-hole in front of the Court-house has been of the greatest service in providing a pure supply of water during the dry seasons. During the rainy season most of the inhabitants use tank-water.

(b) to (k) Same as in previous reports.

(l) No Hospital accommodation exists, not even at the Gaol, and a small Hospital, such as three huts, is really needed for the treatment of certain cases of illness, accidents, assaults, and others requiring small surgical operations.

I would recommend the District Council to give this matter its consideration and vote a small sum (say £50) for the necessary buildings.

(m) No cases of Diphtheria or Enteric Fever to my knowledge occurred.

On the 27th of July, 1904, two cases of Small-pox were discovered in Headmen Lekhapha's Location—source of infection unknown. The people around the kraal were vaccinated, 188 altogether. No further cases were reported. Cost, £10 12s. 2d. ,

On the 18th February, 1905, a case of Small-pox was discovered on the border of the District in David Molefe's Location. The usual vaccination around the infected area was performed, and there was no spreading of the disease. It is difficult to judge the amount of success in vaccination as the location is far from the village. Cost, £6 15s.

Hereditary Syphilis is the most common disease among the Basuto population, and the infant mortality from bowel complaints in the District is very considerable, caused specially by unhealthy feeding.

I know of a Native woman, who had eight children, and all died under a year of age, and I cannot attribute it to any other cause but to improper feeding.

There are still some cases of uncertified Lepers in the District.

(vi) MOUNT FRERE.

DR. R. C. MORLEY HOARE, DISTRICT SURGEON.

My report for the years 1904 and 1905 does not materially differ from that of 1903, with the exception that an outbreak of Scarlet Fever took place at the end of the District, the peculiarity of which being the virulence of the throat symptoms. I traced five deaths to the disease.

There have been the usual Small-pox outbreaks, one in 1904 and two in 1905. Both these were quickly put down by means of vaccination and quarantining the infected kraals. Cost, 1904, £42 16s. 6d.; and, 1905, £43 18s. 6d. I am quite certain that when the District is thoroughly vaccinated, as I hope it will be in 1906, the Magistrate having gone very thoroughly into the matter with regard to the centres of vaccination, which I think has never been done before, that there will be no further outbreaks of the disease.

During the three years I have been in this District, I have seen nearly one hundred cases of Small-pox, all of which had never been vaccinated; some of them being confluent and people, who were living and sleeping in the same huts with the confluent cases, who had been vaccinated, did not take the disease. This will shew what vaccination has done in this District.

The most prevalent disease here is Measles, the chest troubles carrying the children off in scores. It affects old as well as young. This has not been prevalent in one place, but throughout the District.

The vaccine supplied by Government appears to be very satisfactory, judging by results I have seen, but, owing to no second visit being allowed, no definite report can be made as to its quality.

I had one case of Enteric in 1905 due, I believe, to the contaminated water-furrows.

There are many cases of Leprosy in the District which have never been certified. The Magistrate knows of this and advocated a Leper tour, but, owing to retrenchment, the Government could not see its way to sanction it.

The Contagious Diseases Act of 1885 is not in force in these parts; it would be an excellent thing if proclaimed in the Native Territories.

(a) There is no alteration in our water-supply, but I think there will be, as we have applied for a Village Management Board.

(b) Nil.

(c) No alteration.

(d) None.

(e) No alteration. I should condemn the butchery at once as it immediately adjoins and is only separated by a wall from the stable at the local hotel in which a severe outbreak of Glanders took place last year, but I have no power to do so.

(f) and (g) No alteration.

(h) Bad.

(i) and (k) No alteration.

(l) None. A Cottage Hospital is needed.

(vii) QUMBU.

DR. DAVID MELVILLE, ACTING DISTRICT SURGEON.

There is very little to add to the last report *re* the health and sanitation of this District.

The matters under headings (a) to (f) are the same as in previous reports.

(g) A number of pigs is kept in the village, and the odour from the pig-styes is at times overwhelming. It would be a good thing to either remove the pigs or insist upon the styes being kept thoroughly clean.

(h), (i), and (k) Same as before.

(m) There have been no further outbreaks of infectious disease beyond those reported in the last half-yearly return. Whooping Cough appeared as usual, and accounted for a considerable number of deaths among the children in this District.

I should like to bring to notice the condition of the local gaol. There are three cells, each having about 1,000 cubic feet of air space, which are supposed to accommodate fifteen prisoners—ten males and five females. There is one yard common to all of these. Thus it is impossible to keep the hard labour prisoners separate from those awaiting trial, nor either of these from the female prisoners. More than that, there are frequently over twenty prisoners in gaol, and when a lunatic happens to be brought to gaol, there is overcrowding, to say the least of it. The ventilation of these three cells is of the very crudest. It is a disgrace that such a place should be in existence.

(viii) TSOLO.

DR. DAVID MELVILLE, DISTRICT SURGEON.

There is nothing further to add to the report of 1904. Since the end of June, 1904, there have been six outbreaks of Small-pox, but as my "Locum" has left no records of these outbreaks, I am unable to supply any information in connection with them.

Since returning to duty in December, 1904, there have been no changes under headings (a), (b), (d), (e), (f), (h), (k), and (l), and these remain the same as in former reports.

(c) I notice that refuse from stables and gardens in a number of instances has been thrown out into the public streets, and there constitutes a nuisance of the worst variety. This should be stopped.

(g) Several people are now keeping pigs in the township, and the odour from some of the pig-styes is at times overpowering. In my opinion, no one should be allowed to keep pigs in the village.

(i) Arrangements are now being made for the establishment of a cemetery. The want of a burial-ground has been felt for a long time, but steps are now being taken to remedy this state of affairs.

(m) There have been no cases of Enteric Fever, Diphtheria, or Small-pox. There has, as usual, been an outbreak of Measles in the District generally. As these cases are not brought to my notice officially, it is impossible to give any details, but there has been an unusually large number of cases with a high death-rate from Pneumonia as a complication. Whooping Cough has also been very prevalent among children, and has caused many deaths. This disease seems to be getting much worse every year. Consumption is also on the increase, but only among the dressed Natives, the raw Native being very little affected.

(ix) UMZIMKULU.

DR. T. MAST, DISTRICT SURGEON.

(a) Since the construction of a water-furrow, which is fed by a natural spring situated some little distance outside the village, the difficulty of obtaining a good supply of water, both for domestic purposes and the irrigation of small gardens, has to a great extent been overcome. Many householders conserve the rain-water in large tanks. The district generally has an abundance of good water.

(b) There is no system of sewerage and drainage.

(c) Cess-pits are in general use, but, due to the smallness of the white population, no ill effects arise in the village. Kitchen and household refuse are dealt with by each householder by throwing it in waste places.

(d) The houses are scattered throughout the village, in good condition, and fit for human habitation. I know of no cases of overcrowding.

(e) The slaughter-houses, butcheries and bakeries are well managed, and kept in hygienic condition. I am not aware of there being any dairies. Human food is properly stored, prepared and sold.

(g) With the exception that an occasional duck, dog or other animal may at rare intervals pollute the water furrow, the keeping of swine and other animals causes no inconvenience.

(h) The many Native Locations in the District seem to be fairly clean, although the so-called raw Native is a dirty, unsavoury specimen of mankind, and from his habitation odours of a very unpleasant nature often emanate, yet the people seem healthy. The majority of the Natives are, however, clean in their habits, many of them indulging in the exercise of swimming in the various rivers.

(i) The cemetery is well situated, and is kept in fair order.

(k) No nuisances have been brought to my notice.

(l) Unfortunately there is no hospital accommodation in this District for the isolation and treatment of infectious and contagious diseases, so that not only is any infectious or contagious disease likely to spread locally, but Natives returning from other Districts or Countries may be the means of disseminating diseases of a contagious and infectious nature—especially small-pox.

(m) There have been several outbreaks of a mild form of Small-pox in the District, but no deaths have resulted as far as I could ascertain. At one centre, Melanzana's Location, Rietvlei, at the Ibisi, three cases of supposed Small-pox were reported. On visiting the kraal I found that the three surviving children were suffering from Whooping Cough, and the father told me that the four deceased children had died from the same disease. Whooping Cough has been very prevalent, and this disease, with its sequelæ, has probably been the cause of the greatest number of deaths amongst children due to infectious diseases.

Steps for the prevention of the spread of Small-pox were immediately taken, by vaccinating all unprotected Natives, in which matter I received prompt assistance from the local authorities.

WALFISH BAY.

DR. F. C. SINCLAIR, DISTRICT SURGEON.

As the Circular Letter, No. 67 of 1905, calling for the Annual Health Reports from District Surgeons directs that these should cover the two calendar years 1904 and 1905, I feel it my duty to mention that, owing to my having been appointed to the District Surgency of Umzimkulu, I left here in March, 1904, returning again as District Surgeon a year later in March, 1905. However, as I have Dr. Mast's report of the first half of 1904 to guide me, and being at all times made welcome to any information necessary to the making of such a report at the office of the Resident Magistrate, I shall endeavour to supply a complete report for the two years as requested.

As one of the most noteworthy events in the two years comprised in this report, and as bearing to some extent on the health and well-being of this community, I may mention the war in the adjoining German territory, which, beginning with the revolt of the Hereros in the north, early in 1904, soon spread to the Namaqua tribes in the south, and still continues to be waged in a somewhat desultory manner against the southern Namaqua tribes, the Hereros being now probably completely crushed.

To quell the revolt of the Native tribes within the vast territory known as German South-West Africa, a large force of troops was despatched from Germany, and these were for the most part landed at Swakopmund, a port situated some twenty-two miles to the northward of Walfish Bay.

The exaggerated reports of casual travellers, traders and others, had for long credited Hereroland with being immensely, even fabulously, rich in cattle, but the necessity of supplying large bodies of men with the cattle necessary for slaughter and transport soon pricked the bubble reputation of the country in this respect.

As a matter of fact cattle, sheep, horses, etc., had and still have to be imported in large numbers for both of the above purposes from Cape Colony, Natal and elsewhere, and this community, which before the outbreak of war had obtained its supply of slaughter animals at a moderate cost from German territory, suddenly found itself faced by a meat famine, even the few animals raised by Natives in outlying parts of this District being eagerly sought after by German buyers.

Fresh meat, indeed, as a regular article of diet, has become unobtainable here, and is likely to remain so for some time to come, except to those willing to incur the cost of sending all the way to Swakopmund, where it may be bought at a price corresponding to its scarcity. Occasionally frozen meat may be obtained as a great favour from a passing steamer.

War, as is well known, invariably attracts large numbers of camp followers, some engaged by the Military Authorities to act in various useful capacities other than actual fighting, others again being mere adventurers and ne'er-do-wells. A large number of the former class were recruited by the German authorities in Cape Colony and Natal to act as transport-riders, cattlemen, etc., and of the latter class only too many found their way into German territory. Then under the plea of ill-treatment by the German Military Officials, many of these men crossed the border into Walfish Bay to claim protection as distressed British subjects.

Up till a few months ago all of these refugees, who could establish their claim, were duly enrolled and put on relief works here at the rate of two shillings per diem, at which rate, by a system of combination, they were enabled to live in comparative luxury.

The housing of a comparatively large number of wanderers of this description was a more difficult problem, and was left entirely to themselves to solve, which they did by monopolising the various outbuildings of the Government establishments, haylofts, coal sheds, stables, etc.; all served as temporary free lodgings for these men.

As District Surgeon, I was called upon to attend to various ailments occurring amongst distressed British Subjects in receipt of relief here, but with the exception of one case of Typhoid Fever and another of Sloughing Carbuncle, none were of a very serious nature.

The case of Typhoid Fever occurred in a young man but recently arrived from Swakopmund in April, 1905. Every precaution was taken as soon as the disease was diagnosed as such to prevent its spread by the isolation, as far as was possible, of the patient, and the efficient disinfection and burial of all excreta. The case proved a severe one, but recovery eventually ensued, although the only accommodation which could be afforded the patient at the time was a disused mule stable.

The case of Sloughing Carbuncle was that of a middle-aged man, who arrived here from German territory in forlorn condition, and with an extensive sloughing lesion, situated at the nape of the neck, from which a profuse and exceedingly offensive discharge occurred. This man, I am sorry to say, died of exhaustion after a lingering illness.

Eventually, after a more or less prolonged stay at Walfish Bay, these distressed British Subjects were removed at various times to Cape Town at Government expense.

There can be no doubt that the stories told by these men of ill-treatment suffered by them at the hands of the German Military Officials were grossly exaggerated, and that the real cause of them seeking relief here was their unwillingness to submit to the restraints of foreign Military discipline, as well as the prospect of free conveyance to Cape Town. This was shewn, when the Colonial Government, after, I presume, due investigation into the more serious allegations made by men of this class against the German Military Authorities, gave notice that no more free passages to Cape Town would be given. From that time a very decided decrease in the numbers seeking refuge here from across the border took place until for some time past the arrival of wanderers of this description has ceased altogether.

During the past two years many Native refugees, mostly Hereros, have arrived here from German territory. These have always been accorded the protection of the Colonial Government. All have left here at various times, having found no difficulty in obtaining employment in the Namaqualand and Johannesburg Mines.

Early in October, 1905, a party of 107 Herero War Refugees, men, women and children, having eluded the vigilance of the German patrols, reached Walfish Bay. Soon after their arrival Small-pox made its appearance amongst these people, the first case being discovered on the 19th October. Twenty-seven cases in all occurred amongst the Refugees, and all in unvaccinated persons. All of those attacked recovered.

The disease was conveyed from German territory. As soon as the first case was discovered a separate camp was formed near Sandfontein, and isolation of the sick and all contacts completely effected. I visited the camp at frequent intervals, and saw that everything was done to prevent the spread of the disease. Vaccination was carried out as speedily as possible throughout the District with a fair

amount of success, and only one case of Small-pox occurred in the District outside the Refugee Camp, this being a Native child (also unvaccinated), residing at Sandfontein, who eventually made a good recovery. The last case was discharged about December 13th, 1905. A case of Small-pox occurring in February, 1905, is also reported by Dr. Mast. The patient was a Native woman, and came from Swakopmund.

An outbreak of Measles (reported by Dr. Mast) occurred in 1904, which, beginning amongst the Natives, spread to the small White community, until, as Dr. Mast says, "All who had not previously had the disease were attacked."

The health of the White community residing here has remained good. One case of Typhoid Fever, with recovery, occurred in April, 1905. The cause of infection in this case could not be definitely traced.

The Native population of this District seems to be entirely free from Leprosy. I have not seen a single case in five years' time. Fish, I may mention, is the staple article of diet of these people.

I am frequently called upon to treat cases of Scurvy occurring both amongst the Natives resident in this District, and in those arriving from the Interior, who have to endure for a time the entirely different and to them adverse climatic influences of the Coast. In the latter the disease is apt to assume a very intractable form, owing to the peculiar mental oppression and lethargy accompanying the physical manifestations of the disease, which frequently defies all treatment.

Pulmonary Tuberculosis is unquestionably very rife amongst the Native population, but exact information as to its incidence and the mortality caused by it is almost impossible to obtain, owing to the fact that the Natives but seldom consult a medical man for the complaint, and continue to pursue their usual avocations until prostrated by the disease, when, as a rule, nothing more is heard of a case until the death is reported, usually as caused by Bronchitis or Pneumonia. I am afraid that so long as the present rather lax system of registration of deaths in vogue in Native territories continues little better is to be hoped for.

For the physical deterioration of the Natives of the District and for the prevalence of consumption amongst them alcohol is undoubtedly largely responsible. Wages, when earned by these people, are hoarded for the purpose of purchasing gin, instead of being spent on food for themselves and families. It is indeed a disgraceful thing to see children starved, in order that their dissolute parents may enjoy the usual Saturday night's orgie.

No doubt prohibitory laws are in force, but such are not of much value where a large White population exists, and consequently the means of obtaining liquor are multiplied. The White population of the District is small, and there are but two licensed houses, but, in Swakopmund, there is a large and increasing White population and numbers of public houses. Natives, both male and female, are constantly on the move between here and Swakop, where they earn wages, the former as labourers, the latter as servants or prostitutes. Liquor can be obtained by Natives in German territory on payment of sixpence for a permit to purchase it. If the sale of liquor were restricted and stopped altogether in this District, the Native would simply travel to Swakop, and get it there.

The deplorable results of alcoholic excess are to be found quite as often, probably indeed oftener, amongst European than amongst Natives.

Prohibitive Legislation applicable only to the Natives serves, I think, largely to accentuate and increase racial differences and animosity, and through the natural perversity of human nature is frequently provocative of the evils it is meant to obviate. Personally, I should be glad to see all spirituous liquors or beverages, containing over 10 per cent. of alcohol, relegated to the shelves of the druggist to be described and sold as drugs, and sold only to the order of a Licensed Medical Practitioner.

At all events, it seems certain that so long as public opinion permits of the open sale of a potent drug, such as alcohol is, whether in the gilded saloon or wayside shebeen, for just so long will it continue to wreck the lives of thousands yearly.

(a) The Condition of the water-supplies.—The township of Walfish Bay, being situated at a distance of some three and a half miles from the nearest supply of natural water, and this being very brackish, the community obtains its supplies of fresh water from a condenser, maintained by Government, and this water is good and chemically pure.

For other than drinking purposes, such as washing, etc., water is drawn from Sandfontein, where wells exist.

The Natives, who reside for the most part at the village of Sandfontein, use the brackish water for all purposes, and maintain the wells with some care against surface pollution.

(b) Sewerage and Drainage.—Nil.

(c) The Collection and disposal of Night-soil, etc.—Night-soil is removed at frequent intervals to a safe distance from the settlement and buried in the sand.

Slops and other household refuse are removed to a sufficient distance from the dwelling-houses to prevent any likelihood of pollution from these sources.

(d) Overcrowded Dwellings, etc.—The European community reside in roomy and comfortable houses, built of wood and iron, quite suited to the climate. There is no overcrowding.

The Natives live amongst the sandhills, which shelter the dwellings to some extent from the full force of prevailing winds. These dwellings are for the most part flimsy “pondoks,” covered with bags or anything available.

Perhaps the best that can be said of these structures is that ventilation is at all times amply provided for.

(e) In Walfish Bay the butcher's occupation is gone since the war in German territory cut off the supply of meat from the interior.

(f) Food is sold in the form of meal, rice, flour, etc., and as tinned meats, milk, etc. No cause of complaint exists in the matter of its storage.

(g) The keeping of Cattle, Swine, and other Animals.—Horses and donkeys are kept by several of the residents, and also on the Government establishment, but no sanitary inconvenience arises from this cause.

(h) The Good Order, Cleanliness, etc., of Native Locations.—The principal Native Location is situated at Sandfontein. Order is fairly well maintained. No attempt at cleanliness is made. Sanitation is provided for by Nature.

(k) Nuisances when reported are attended to by the police.

(l) The local cemetery is kept in excellent order.

(m) With the exception of the outbreaks of Small-pox and Typhoid Fever already mentioned, there were no other cases of infectious disease. As regards vaccination, I vaccinated in all 178 persons during 1905. Of these 136 were successful, and 39 unsuccessful. Many of the people throughout the District had been successfully vaccinated in former years, and I only considered it necessary to vaccinate those who had not been previously vaccinated and those not showing satisfactory marks.

I believe that I succeeded in inspecting the great majority of the residents of this District, and that few or none escaped vaccination where this was necessary, and also that the thoroughness with which the operation had been carried out both in former years and at the time of the outbreak of Small-pox, prevented the spread of the disease.

The total cost incurred by Government in dealing with Small-pox during 1904 and 1905 amounted to £11 3s. 6d.

Report of the Medical Officer of Health for the Colony.

PART III.

Reports of Local Authorities.

CIRCULAR LETTER No. 68 OF 1905.

Colonial Secretary's Office,
Cape Town, Cape of Good Hope,
19th December, 1905.

ANNUAL HEALTH REPORTS FOR 1904 AND 1905.

SIR,

I am directed by the Colonial Secretary to inform you that he will be glad to receive at the earliest possible date, for the purpose of the Annual Health Report to be presented to Parliament, such information as you may be in a position to furnish in regard to the health and sanitation of the area under your jurisdiction during the calendar year ending on the 31st December, 1905.

With reference to this matter, I am to remind you that the last Health Report only covered the period comprised in the half-year ended on the 30th June, 1904, and that, owing to the decision of Parliament to revert to the former practice of rendering the Reports for the calendar instead of the financial year, a period of eighteen months will have elapsed since your last Report was made; and, therefore, in the event of any matter of importance to which you desire to draw attention, having arisen during the calendar year of 1904, you should include the reference to such matter in your present Report, making clear, however, the date to which such reference refers.

The report should furnish information on the following points:—

- (1) Water supply; describing the source, whether surface, river, spring, or other; whether the source belongs to or is under the control of your Local Authority, and whether it is situated within or without the area of your authority; by what means the water is collected, stored and distributed; whether by pipes or open furrows; whether the supply is adequate, and whether the water is pure or is liable to pollution.
- (2) The system of collection and disposal of (a) night-soil, (b) slop-water, and (c) household and other refuse.
- (3) The extent to which infectious disease has prevailed, and what steps have been taken both for preventing and dealing with outbreaks thereof, and especially whether any Infectious Diseases Hospital accommodation has been provided.
- (4) Whether your Local Authority has established any Public Abattoirs or contemplate doing so. What are the conditions under which slaughtering is at present carried out?
- (5) Is any system of meat inspection carried out? If so, with what result as regards the detection of diseased and unsound meat.
- (6) What action has been taken to remedy any sanitary defects that may have been found to exist during the year (especially such as the pollution of water, the accumulation of filth and noxious matters, overcrowding of dwellings, and the habitation of any that are unhealthy or dangerous to life), and generally to prevent or limit the occurrence of preventable disease.

- (7) The extent to which rats are prevalent in the district of your Local Authority, the steps taken for their extermination and with what success.
- (8) Any other matters relating to the Health or Sanitation of your area which may be deemed worthy of report.

In the event of your Local Authority employing a Health Officer, the above Report should be made by him.

I have the honour to be,

Sir,

Your obedient servant,

NOEL JANISCH,

Under Colonial Secretary.

To the Chairman or Mayor of every Municipality,
and the Chairman of every Village Board
or Local Authority under
Act No. 23 of 1897.

ABERDEEN.

ABERDEEN (MUNICIPALITY).

(1) The town is supplied with water for domestic and irrigation purposes by a spring situate on land the property of the Dutch Reformed Church, over which the Municipality has no control, in terms of judgment of the Supreme Court, given in August, 1905, although the spring is situate within the region of the Municipality. In the early part of 1905, the Municipality had had two boreholes sunk, which had given a considerable increase in the quantity of water; cost of boring, etc., had been over £200. The water from the fountain is collected in a shallow intake dam, and thence brought into town by means of an open furrow. The supply is ample, but liable to pollution.

(2) Night-soil is collected nightly, and deposited in a sterco-hole some distance from town. For slop-water no provision hitherto has been made. Household refuse is collected weekly, and deposited in middens. Building refuse is utilised to level up streets.

(3) During the last eighteen months, eleven cases of Typhoid Fever have occurred in the town, five of which occurred in one house; two were brought in from the country. In the latter half of 1904, one case of Membranous Croup occurred; one patient suffering from Diphtheria was brought in from the country, and three cases of Scarlatina.

Towards the close of 1905, one case of Diphtheria and two cases of Scarlatina were notified. Care is taken in thoroughly disinfecting premises, beds, tables, etc. There is no Small-pox Hospital in existence.

(4) There are no public abattoirs, nor have any plans been proposed for the erection of same. Butchers have the required animals slaughtered in their yards; blood and all refuse are at once removed. Slaughter-places are duly inspected.

(5) The Sanitary Inspector looks after the meat brought on the Market.

(6) There have been no material steps taken to remedy sanitary defects. Arrangements are now, however, in progress to improve the system of night-soil removal.

(7) There are no rats in Aberdeen, but their absence is made up by a large number of mice.

ALBANY.

(2) GRAHAM'S TOWN (MUNICIPALITY).

*Report of Dr. J. BRUCE-BAYS, Medical Officer of Health.

(1) The water-supply is drawn from the "Milner" and "Jameson" Reservoirs, which are formed by throwing two dam walls across two valleys where the water from a very large catchment area converges. The water is mostly surface, but there are also springs which run the greater part of the year. The source, with the exception of a portion of an adjoining farm, belongs to and is under the control

*Forwarded by Municipality for publication.

of the Local Authority, but being situated about six miles out is beyond the Municipal area. The water is impounded by two dam walls, and is then run by means of covered iron pipes either into the water mains of the town or into the Grey Reservoir, which is within the city limits. There are several reservoirs thus situated, but owing to their leakiness or the fact that the catchment area is thickly planted with trees, but little water is caught in them. I have urged the desirability of delivering the water direct into the mains without previously running it into the local reservoirs on account of the greater likelihood of contamination. The supply is fully adequate, the "Milner" holding 50,000,000 gallons and the "Jameson" 100,000,000 gallons; both have twice been running over during the past summer. Both communicate with the same pipe track into town. The water contains more vegetable organic matter than it should, for the removal of which filter beds are necessary, which would render the water pure and check the silting up of the water pipes. The liability to pollution is small, as all animals are excluded from the portion belonging to the Corporation.

(2). (a) A very good system is now in force for the disposal of the night-soil. A regulation galvanized iron pail is compulsory at all houses, the contents of which have to be removed at least once a week, for which removal a uniform charge of sixpence is made. Public latrines emptied every night are provided for the use of the Natives. The sterco is removed in tip-carts by the contractors, of whom there is one to each of the four wards into which the town is divided, and deposited in pits about two miles from the centre of the town, which pits are dug and attended to by a contractor at £250 per annum. The provision of a covering lid to each pail and the removal of pail and contents, together with the utilization of the sterco for manure, would render the system as perfect as the pail system can be.

(b) The slop-water is ordered to be removed by slop-carts from all premises where the land space is not sufficient to permit it to be disposed of on the ground. This is done at all the large educational establishments. Arrangements for paying the moderate charge are made by each householder individually. The slop-water is carted out of town about a mile, and is poured on a large rubbish deposit which acts as a filter.

(c) The household and other refuse are taken out by private carts at a charge of from 6d. to 1s. per load, and deposited at certain places on the outskirts, there being one for each quarter of the town.

(3) During the eighteen months covered by the report, from July 1, 1904, to December 31, 1905, there have been 48 cases of Enteric Fever notified, 13 of Diphtheria, 3 of Scarlatina, and 7 of Leprosy. Of the Enteric cases, 33 were Europeans, and of the total number at least 9 were contracted elsewhere, and were only treated in Graham's Town. All the Scarlatina cases were brought into town, as were 3 of the Diphtheria patients. Tuberculosis became notifiable only last November, and 12 cases were reported in two months; about half of these had contracted the disease in other parts.

The Victoria Fever Hospital, a well constructed modern building as regards the eight small wards, is now being used for treating Enteric and other forms of infectious and contagious disease, with the exception of Small-pox or Plague, a spot for which is reserved at a distance from the town. An Equifex disinfectant is provided. The Sanitary Inspector under my directions disinfects premises where cases of notifiable disease have arisen. Provision is now being made for special pails for the excreta of Enteric patients, etc., and the removal of such pails with their contents.

(4). The Local Authority fully recognising the present unsatisfactory condition of the abattoirs in use, has had plans drawn up for the provision of public slaughter-houses. The plans are of a building which should meet all requirements, and the Sanitary Committee being anxious to secure all modern improvements for the town as far as possible, would doubtless undertake the construction were funds available at the present time. Several improvements have been carried out; the town water-supply has been led to each slaughter-house, the floors have been attended to, and pig-styes have been provided near by, while arrangements are now being made to fence off the ground intended for the burial of offal. The houses and ground are held by butchers at the pleasure of the Council.

(5). As Medical Officer of Health, I make frequent periodical inspections of the butchers' premises and of the meat. This has led to the condemnation of unsound meat, diseased viscera and especially to the detection of much unsound pork affected with measles. Prosecutions with convictions have taken place. I have during the hot weather had to condemn much fish.

(6). Regular inspection is made of all premises in the city by the Sanitary Inspector, who orders the immediate removal of all filth and noxious matter. Over-

crowding within the town limits is of very infrequent occurrence, and is abated as soon as detected. Houses not in a sanitary state are dealt with according to the requirements of the case. Cases of infectious disease, if not able to be isolated at home, are removed to the Fever Hospital, and the premises and belongings disinfected at once.

(7). Rats are not more than usually prevalent. Since the Government refused to contribute the money for their destruction, no steps have been taken for their extermination.

(8). A considerable portion of the river beds have been paved with concrete or with channelled concrete blocks, with great improvement from a sanitary point of view, and the work is to be still further extended. Three public urinals have been provided on the dry sawdust system, which answers admirably, and many of the old closets belonging to the houses have been modernised. The death-rate amongst the Europeans has been low, and there has been nothing in the nature of an epidemic.

(ii) ALICEDALE (VILLAGE MANAGEMENT BOARD):

(1). The water-supply is mainly dependent on rain water collected from the roofing, supplemented in dry seasons from the bore-hole, which is brackish but quite wholesome. On the whole the supply is adequate for all purposes.

(2). The tub system is in operation. All night-soil, slop-water and refuse are removed twice a week. On the whole the sanitary service is excellent.

(3). There have been no infectious diseases during the period in question. This being only a small community there is no Hospital accommodation. Accidents and serious cases are as a rule removed to the Albany Hospital, Graham's Town.

(4). There is no slaughter-house, and the Local Authority do not contemplate having any. A good proportion of the meat arrives here by train. What is slaughtered is done in the best manner possible under the circumstances.

(5). There is no system of meat inspection, but the local butchers were on one or two occasions warned by the Secretary of the Health Board that their premises were not as clean as might be, and the matter has been put right without any more bother.

(7). Rats are not found in this village.

(iii) SALEM (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from never-failing springs, and rain water stored in tanks.

(2). Each house has a W.C., and the dry-earth system is in vogue. Refuse is buried.

(3). No infectious disease occurred.

(5). Rats are very plentiful.

(6). No Health Officer is employed.

ADELAIDE.

ADELAIDE (MUNICIPALITY).

*Report of DR. WILLIAM DAVIDSON, Medical Officer of Health.

(1). Up to the end of 1904 there was no water-supply for the village, the inhabitants depending on the rainfall which was conserved in tanks. About the end of 1904 the Adelaide water scheme was completed, and since then water has been brought into town in pipes from the Koonap River and distributed to the various houses by pipes. The source of the water is without the area of the Local Authority, hence there is no possibility of preventing pollution of the river higher up. The water cannot be looked upon as pure, and certainly ought to be boiled before being used for drinking purposes.

(2). Cesspools are still the order of the day and act as receptacles for night-soil and slop-water, whereas household and other refuse are in most cases thrown into a heap in a corner of the yard. When they accumulate they are then taken out of the village and deposited at a place set apart for the purpose.

(3). During 1904 and 1905 the town has been free from Small-pox. During the earlier months of 1904 Enteric Fever was prevalent in the Native Location, and a few isolated cases occurred amongst Europeans, and from August to October of the same year Scarlet Fever was prevalent, and this was followed by an outbreak of Diphtheria during the months of November and December.

In 1905, during the month of April, Diphtheria again broke out, but only appeared in isolated cases, and from then on to December the town was practically free from infectious disease. During December, 1905, a few cases of Enteric Fever again broke out.

There is no Infectious Diseases Hospital accommodation in town, and all that can be done in any outbreak is to impress on the inhabitants the importance of isolation so far as that can be done in each individual case.

(4) The Local Authority has not established any public abattoirs, but each butcher has his own private slaughter-house, which is out of town, and consequently is not a source of danger.

(5). No regular system of meat inspection is carried out.

(6). The Local Authority has seen that yards are kept clear of refuse and noxious matters.

(7) No rats exist in town.

ALBERT.

(i) BURGHERSDORP (MUNICIPALITY).

(1). During the past year the town water-supply has been increased by means of a bore-hole and erection of a windmill pump, which delivers water direct into the town main, and thus prevents the possibility of pollution.

(3). The town has been almost free from any cases of infectious disease, and the Council has not yet found it necessary to provide Hospital accommodation for such cases.

(4) and (5). The public slaughter-houses are regularly inspected by the Sanitary Inspector, and are kept in a satisfactory condition.

(7). There being very few rats in this town, the Council has discontinued offering a reward for their destruction.

On the whole the town is in a very satisfactory condition, considering the limited means at the disposal of the Municipality.

(ii) VENTERSTAD (MUNICIPALITY).

*Report of DR. ALBERT P. COATES, Medical Officer of Health.

(1). The water-supply is derived from a fountain belonging to and under the control of the Local Authority, and within the area of the said Authority. The water is collected in a reservoir, built of stone and cement, just completed, of a capacity of 25,000 gallons, approximately. It is distributed by pipes. The supply is inadequate, and a scheme is on foot to augment the supply by the installation of an oil-driven pump. The water is very pure, and pollution practically impossible.

(2). (a) Night-soil is collected by the Municipality, and buried on a suitable site outside the village.

(b) Slop-water is disposed of by the inhabitants.

(c) All refuse is disposed of by the Municipality.

(3). This question has been dealt with very fully in the District Surgeon's report for Venterstad.

(4). There are no public abattoirs, and none are contemplated, as far as I am aware. Slaughtering is carried out outside the village, and the meat carried in to the butcheries.

(5). No system of meat inspection is carried out.

(6). No fresh action has been considered necessary, the periodical inspection being sufficient to prevent these matters arising.

(7). There are no rats.

ALEXANDRIA.

(i) ALEXANDRIA (VILLAGE MANAGEMENT BOARD).

No report furnished.

(ii) PATERSON (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from wells, as also from galvanised tanks, in which rain-water is conserved by all the white inhabitants.

(2). Each tenant has a W.C. in the back yard. This is considered the best means of disposal under the circumstances, as the yards are large and houses as a rule widely detached. Refuse is either burnt, buried, or taken to a hole outside the village boundary.

(3). There has been no infectious disease for about four years.

The health of the District has been excellent for the past three or four years.

ALIWAL NORTH.

(i) ALIWAL NORTH (MUNICIPALITY).

*Report of DR. LUTHER WATSON, Medical Officer of Health.

(1). The town has three separate water-supplies, each of which, however, is liable to pollution.

(a) Rain-water collected from house tops is mainly depended upon for drinking and domestic purposes. Tanks and roof troughing rarely being cleaned out are a continual source of danger. Dead rats, mice, bats, frogs, and a large amount of vegetable matter and mud have been found in them.

(b) The mineral spring water runs in open furrows from the springs one and a half miles from town, and through the streets. This water is much used for baths and rough household purposes, but not for drinking.

(c) The new water-supply from Orange River was inaugurated in December, 1905, by the Town Council.

Owing to faulty construction of filter beds the water is at present quite unfit for human consumption. The pumping power is obtained by Turbines in the bank of the river. Owing to the excessive amount of sand in suspension the brass linings of pumps already require repair. If means of filtration and increased power can be obtained, this scheme should prove a boon to the town.

(2). The Council are now commencing a regular weekly removal of night-soil and rubbish, and preparations are being made for the daily removal of slops by the Municipal staff.

(3). The following cases of infectious disease were notified:-

July 1st, 1904, to December 31st, 1904: Enteric Fever, 3; Chicken-pox, 5; Erysipelas, 1; Puerperal Fever, 1; Total, 10.

January 1st, 1905, to December 31st, 1905: Enteric Fever, 14 (January to May); Small-pox, 4; Measles, 23; Erysipelas, 2; Puerperal Fever, 3; Total, 46.

All premises are inspected, and in cases of Enteric Fever an extra tub is provided for nightly removal of night-soil, baths for disinfection of linen, etc., and when necessary disinfectants are provided gratis.

Tenders are to be called for the erection of an Isolation Hospital for six beds on plans already approved.

(4) Abattoirs will be dealt with when fresh, clean water is obtainable. Private slaughter-houses are subject to Sanitary Inspector's supervision.

(5). No regular inspection of meat is carried out. It is however examined by the Medical Officer of Health when any suspicious case occurs.

(6). Roads are being levelled and side furrows paved.

Vaccination is enforced at Municipal Location by Superintendent.

(7). Rats are not reported as unduly troublesome, no special steps are taken for their extermination.

(8). All milk purveyors have to be registered and licenced, and a certificate is granted to those carrying out Council's new bye-laws with reference to cow sheds, yards, airspace, drainage, milk room, etc.

(ii) LADY GREY (MUNICIPALITY).

*Report of DR. LEWIS J. NEWNHAM, Medical Officer of Health.

In reviewing the public health of this village during the last twelve months, although epidemics of Measles and Whooping Cough have prevailed, the sanitary condition of the town has been fairly good and the spread of these contagious

diseases has been due more to individual carelessness than to public insanitation. Water has been scarce in time of drought, but with the opening of the reservoir this evil will be remedied. There have been sporadic cases of Enteric Fever and Diphtheria, but nothing approaching an epidemic. One case of Scarlatina has come under my care lately, but the disease has not yet spread.

I have to thank the Municipality and the Sanitary Inspector for their promptness in carrying out any suggestions I have offered.

(iii) JAMESTOWN (VILLAGE MANAGEMENT BOARD).

(1). With regard to the water-supply, there is nothing to add to the remarks contained in previous reports regarding the running stream, its source, etc. The Board sank a bore-hole $3\frac{1}{8}$ inch. in 1905, and at a depth of 104 feet struck an inexhaustible supply of water, which will be used for irrigation purposes.

Several residents have sunk wells, and two of the residents bore-holes, both for domestic purposes and private irrigation, with satisfactory results, the water in all cases, save one, being pure and wholesome. The water from one bore-hole was slightly impregnated with and tasted of tar, but after exposure, both smell and taste disappeared.

(2). The night-soil, where cesspools are not in use, is disposed of by private contract, and duly buried outside the village. Slop-water, household and other refuse are deposited by residents in a deep donga below the village.

(3). No official report has been made to the Board for some time past of any infectious diseases, though it is understood that Measles was prevalent during the latter part of 1905. The outbreak was not, however, of a severe type, and did not prevent the Public School continuing its duties, nor did it affect the attendance very much.

(4) to (8). These headings call for no special remarks, there being nothing to complain of.

BARKLY EAST.

(i) BARKLY EAST (MUNICIPALITY).

(1). Water-supply, for domestic purposes only, is derived from a spring and a bore-hole 123 feet deep. These supplies are, as far as is known, free from any pollution. The Council is at present engaged trying to solve the difficulty of a more copious supply for all purposes. The present supplies are under the control of the Council.

(2). (a) The disposal of night-soil is as previously reported. It is hoped that the duplicate pail system will soon be in full operation.

(b) There is much room for improvement in regard to the disposal of slop-water. The question of expense bars the way in the meantime for any satisfactory system.

(c) Household refuse is removed by cart as required by different householders, the Sanitary Inspector keeping the public fairly well up to the mark in this respect. Heavy expense also retards a Municipal system handling this.

(3). There have been no serious outbreaks of infectious disease during the period under review. The most serious epidemic has been Measles. There is no Hospital accommodation, but two Small-pox Lazarettos are in existence, which on an emergency could be used for other diseases. There has been some agitation for general Hospital accommodation, but unless Government comes to the assistance of the Municipality with funds it will be some time before this can take definite shape.

(4). A Municipal slaughter-house is let to two butchers, at which the public can slaughter at a fixed tariff, or have the work done.

(5). No system of meat inspection is carried out.

(7). Rats, unfortunately, are on the increase, and the public has been warned to keep them in check, and the danger attendant upon these creatures duly pointed out.

(ii) RHODES (VILLAGE MANAGEMENT BOARD).

No report furnished.

BARKLY WEST.

(i) BARKLY WEST (VILLAGE MANAGEMENT BOARD).

There is no change to report since the last report.

A patient in the Barkly West Hospital developed Diphtheria. She recovered, and no other case occurred. The premises occupied by the patient before her removal to Hospital were properly fumigated and generally cleaned up.

(ii) DANIEL'S KUIL (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from springs. The source is situated within the area, and under the control of the Board. The water is conveyed in open furrows, the supply being good, pure, and not liable to pollution.

(2). Night-soil is removed by bucket, and buried at a safe distance from the village. Household and other refuse are collected and burned.

(3). There have been no cases of infectious disease in the Board's area during the period under review. No Hospital accommodation is provided.

(4). The village being very small, not being able to support a butcher, slaughtering is done individually by householders, the refuse being disposed of to the satisfaction of the Board.

(5). Washing is done at a suitable distance from furrows, at a place pointed out by the Board. There is no overcrowding of dwellings.

(7). There are no rats in the village.

(iii) BOETSAP (VILLAGE MANAGEMENT BOARD).

(1). The source of the water-supply is under control of the Board, and situated within the area of the Authority. The water is collected in a dam, and distributed by two open furrows at each side of the village. The supply is not adequate for all the erven, and is not liable to pollution.

(2). Nothing is done in regard to the disposal of night-soil, slop-water, and household and other refuse.

(3). No infectious disease has prevailed during the period under report.

(4). The Local Authority has not established public abattoirs, and do not contemplate doing so.

(5). No meat inspection is carried out.

(6). The dam and furrows have been properly attended to and kept clean.

(7). No steps have been taken by Local Authority to exterminate rats.

BATHURST.

(i) BATHURST (MUNICIPALITY).

(1). The water-supply, for household use, is derived from iron tanks in which the rain water is conserved. In addition, there are three springs, one of which is nearly "fresh," and this one supplies the houses without tanks, and other houses when their tanks are empty. The other springs are "braak," but wholesome, and were in constant demand before the era of tanks. The springs are under Municipal control, and are kept from pollution; the furrows leading from them are used by cattle when the vleis are dry.

(2). Night-soil is removed from the school and school-house by means of the pail system. All other houses are provided with cesspools.

(3). Within the last eighteen months there has only been one outbreak of Measles within the Municipality, and that was confined to one house. No other case of infectious disease, as far as I know, has occurred, unless a rash* among the Natives is such. There appear to be no, or very slight, ill effects from it, and, so far as I am aware, it has not affected white children. There is no infectious diseases or other Hospital at Bathurst. Some years ago, when Small-pox was about, a Lazaretto was put up, but it does not exist now. I believe Native huts were erected and destroyed afterwards.

(4). There are no abattoirs here, and no slaughtering.

(5). There are no butchers' shops in Bathurst. We get our meat from Graham's Town, Trapper Valley or Port Alfred.

* Since ascertained to be veld sores.

(6). No action has been necessary; the people have kept their own premises clean. No pollution of the water has occurred, nor has there been any overcrowding. The houses are all separated from one another, the erven large, and no erf has more than one house on it; many have none. There are cattle kraals and pig-styes at or near some of the houses; these are mostly kept fairly clean, but it would be better if they were not allowed; it has, however, become a custom and is hard to overcome, besides this, it is not easy to obtain Government sanction for kraals on the commonage. Still, as I said above, there is plenty of space in Bathurst.

(7). I have not heard of many rats; they come and go. No steps have been taken by the Local Authority to exterminate them. Two or three years ago the Municipal Council asked for Government aid, but for some reason the matter dropped.

Unfortunately we have no Health Officer. The District Surgeon lives in Port Alfred, and no medical man seems anxious to settle in Bathurst.

(ii) PORT ALFRED (MUNICIPALITY).

*Report of DR. CECIL E. JONES PHILLIPSON, Medical Officer of Health.

(1). The water-supply is fully described in my report for the half year ended June 30th, 1904. No alteration has been made since that date.

(2). The collection and disposal of (a) night-soil (b) slop-water and (c) other refuse are also described in the last report. The system is satisfactory.

(3). A few cases of Measles, Mumps, and Whooping Cough have occurred, but no epidemics. No infectious diseases Hospital exists. No contagious diseases Hospital exists. Two cases of Syphilis were under treatment during the months January to July, 1905.

(4). The two local butchers each have their own slaughter-houses. They are well situated, and kept in a satisfactory condition.

(5). Meat inspection is carried out at irregular intervals by me, and at unknown times. Occasionally Measles in pork has been detected, and on two occasions Measles in beef. The butchers send for me whenever meat presents suspicion, and if necessary, it is at once condemned.

(6). Sanitary defects, etc., are supervised by the Town Ranger, advised by me whenever necessary. No overcrowded dwellings exist here. Phthisis amongst the Native population accounts for a very large number of deaths. In order to enlighten the Natives with regard to methods of prevention of the spread of Phthisis the Municipality issued a leaflet, which was distributed among the Natives, as follows (it was printed in Kaffir, but I here give the English translation of same).

Phthisis—preventive treatment.

(a) Systematic cleansing of huts by wet sweeping, with Jeyes' fluid added to the water. (b) Prohibition of spitting in the huts, especially into "sand pans." (c) Overcrowding to be prevented. (d) Increased ventilation and lighting, by means of windows in the huts. (e) All bedding to be aired daily. (f) Fires in the huts are harmful. (g) Patients suffering from the disease should spend as much time as possible in the open air and in the sun. They should always expectorate into some liquid disinfectant such as Jeyes' fluid or other disinfectant, which should be burnt each day. A climate away from the coast is of advantage.

Leaflets are given to all consumptives treated by me.

(7). Rats and mice abound here. Numbers were killed when rewards were offered. This has been discontinued. No methods of extermination except by certain householders are now undertaken.

(8). The health and sanitation of this area may be considered very good.

BEAUFORT WEST.

BEAUFORT WEST (MUNICIPALITY).

*Report of DR. A. WESTBY, Medical Officer of Health.

(1). The drinking water is conveyed from the kloof about seven miles from the town in pipes to a covered-in tank above the town. This tank will hold about a week's supply. It is then conveyed throughout the town. The water is pure and cannot be polluted during its course. The supply is at present sufficient.

- (2). (a) The bucket system is in vogue.
 (b) and (c) Slop-water and household refuse are carted away by the Municipal wagon.
 (3). The infectious diseases reported during the year 1905 were:—Scarlatina, 50; Enteric Fever, 24; Small-pox, 36; Diphtheria, 1. Small-pox broke out on the 11th May in New Street, and has continued to crop up all over the town. It was impossible to trace its source. There are two blocks of buildings outside the Town consisting of four rooms each, where the patients were treated. These buildings are quite unfit for the purpose. There is no Hospital accommodation whatsoever here.
 (4). No public abattoirs have been established.
 (5). It is part of the duties of the Sanitary Inspector to inspect the meat, and no unsound meat was detected during the year.
 (6). The Municipality are framing new bye-laws and regulations, and I have no doubt that when these are promulgated there will be great and vast improvements in all sanitary and other matters in this town.
 (7). No rats exist in this Local Authority.

BEDFORD.

BEDFORD (MUNICIPALITY).

- (1). After intolerable delays we were able to get a private Bill through last session of Parliament, and a contract has been entered into for piping water into town. Water will be piped from intakes to service reservoir (concrete), thence to and through the town by pipes. As the necessary improvement has taken many years to get to its present stage, it appears that the Health Department either does not do its duty, or is powerless to aid beyond making suggestions. Till the completion of the scheme, the system of distribution remains by open furrow.
 (2). A new bye-law provides for fortnightly removal of night-soil. Householders remove refuse to sites appointed by the Council.
 (3). The health of the town has been good. Weekly reports of infectious cases reported are sent to the Medical Officer of Health for the Colony. An attempt was made to have an Infectious Diseases Hospital for town and district, some few years ago, but the Health Department or the Government did not approve of the scheme owing to its being expected to share the expense, and the matter lapsed.
 (4). The Sanitary Inspector reports generally on sanitation and overcrowding. A number of dilapidated huts have been destroyed.
 (5) At one time a reward was offered for rats, but as the Health Department discontinued rewards, nothing is now done to exterminate them. However, they are rare in town.
 (6). The Health Officer is called upon to act in suspicious cases of eruptive disease, but owing to the parsimony of Government in repudiating scale of charges arranged, and subsequent loss to the Municipality is dealing with a former outbreak of Small-pox, the Health Officer's services are rarely requisitioned.
 (7). No remark, unless it be that more police are required to see that the river beds are not polluted, and generally to attend to the well-being of the town.

BREDASDORP.

(i) BREDASDORP (VILLAGE MANAGEMENT BOARD).

- (1). The source of the water-supply is a spring in the mountain, under the control of and within the area of the Board. It is conveyed in a furrow enclosed with barbed wire, and is liable to pollution.
 (2). Night-soil is disposed of by each private individual.
 (3). Hospital accommodation has been provided for the treatment of cases of infectious disease.
 (4) and (5). Nil.
 (6). This is under the supervision of the Board.
 (7). Rats are not prevalent in this District.

(ii) NAPIER (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a surface river, part of which is under the control of the Local Authority. The water is conveyed in an open furrow, and is liable to pollution.

(2). Night-soil and other refuse are buried.

(3). No infectious disease has occurred.

(5). No diseased meat has been detected.

(7). No rats have been found in the area of the Local Authority.

(8). No Health Officer is employed.

BRITSTOWN.

(i) BRITSTOWN (MUNICIPALITY).

No report furnished.

(ii) DE AAR (MUNICIPALITY).

(1). The water-supply is obtained entirely from private wells within the Municipal area. The supply is adequate, and, as far as is known, pure.

(2). Night-soil is removed twice weekly by private contractor, and buried. Slops and refuse are removed twice and three times a week. From the 1st March, 1906, the Municipal Council will undertake the sanitary work, and by so doing hope for a better and more frequent removal.

(3). Only a few cases of Enteric Fever occurred during 1904 and 1905. Nearly all the cases were treated in their own homes. The others were treated in the Railway Hospital. In no case was there an extension of the disease.

There is no Hospital for the treatment of infectious diseases. Should occasion arise tents and other temporary accommodation are provided.

(4). The Municipal Council have not established a public abattoir, nor do they contemplate doing so. Slaughtering is at present carried out in the open by the two butchers here and steps are being taken to have slaughtering carried out at a greater distance from the town.

(5). No system of meat inspection is carried out.

(6). No special action was taken to remedy any sanitary defects, as none was necessary. All general sanitation was attended to and every precaution taken to prevent and limit preventable disease.

(7). There are very few rats to be found, and no special steps were taken for their destruction.

(8). Any other matters of importance will be fully reported on by the District Surgeon, who always willingly places his services at the disposal of the Council, as they have not yet appointed a Health Officer. All sanitary matters requiring attention are dealt with on the advice of the District Surgeon.

A very complete set of Municipal Regulations have been drawn up by the Council, which, it is hoped, will be promulgated soon.

CALEDON.

(i) CALEDON (MUNICIPALITY).

*Report of DR. A. J. ALBERTYN, Medical Officer of Health.

(1). Caledon obtains its water-supply from springs in the Swartberg Mountains. These springs are in the area of the Local Authority. The water is pure, clear and palatable. At its origin it is collected in a cemented reservoir, and from thence it is led to the village in pipes connected with tanks at the various houses, for domestic use. The supply is adequate for the requirements of the town, and there is nothing tending to cause its pollution at its origin or during transit. Water for irrigation purposes is derived from the same source and led into a large reservoir containing some 6,000,000 gallons, from where it is carried in open furrows and distributed throughout the village.

*Forwarded by Municipality for publication.

(2). (a) The bucket system is in vogue. The night-soil is disposed of by means of a wagon, and deposited some two miles outside the village in deep pits dug for the purpose.

(b) Slop-water is dealt with in the same way.

(c) Household and other refuse is collected and deposited about one mile from the town on the north side. This is not a suitable place, as the north wind prevails in Caledon, which blows directly across the dumping-ground towards the town.

An improvement has lately been effected in the way of burning the refuse immediately on arrival at the dumping-ground.

(3). Caledon has been fairly exempt from infectious diseases, but isolated cases of Typhoid Fever, Diphtheria, Measles and Whooping Cough have occurred.

We have no Hospital accommodation for infectious diseases.

(4). The three slaughtering-houses are under the control of the Municipality, and are in a satisfactory state.

(5). There is no system of meat inspection.

(6). The Council have not found it necessary to remedy any sanitary defects during the past year.

7. Rats, since the opening of the railway some three and a half years ago, have become very prevalent. No steps are being taken for their extermination, except by private individuals.

(8). The vault system is still in vogue in our beautifully situated cemeteries. I have repeatedly drawn the attention of the Council to this pernicious custom of concealing the dead, without apparent success.

The narrow lanes intersecting the main streets should be kept clean, and the open, irregular furrows along our streets should be properly attended to and kept in order, as well as being periodically flushed, as there is no system of drainage except that afforded by Nature.

(ii) GREYTOWN (MUNICIPALITY).

*Report of Dr. R. D. PARKER, Medical Officer of Health.

(1). The water-supply is good. It is distributed in open furrows, which are well arranged, but liable to pollution. Some degree of pollution is inevitable. The inhabitants of Greytown nearly all have gardens. At certain times of the day they have the right to dam the furrow near their garden, and lead the water on to their land. When the dam is re-opened it is inevitable that some of the water from the garden trickles back into the furrow. The furrows also are at different levels, and in a few cases the gardens undoubtedly drain into the furrows. The inhabitants are not at present in a position to afford pipes.

(3). Some time ago there was a small outbreak of Enteric Fever in Greytown. The faecal matter was buried in the garden at the lowest possible level, but that the furrows did become polluted was indicated by several consecutive houses along the course of the furrows becoming infected. An effort was made to enforce the compulsory use of closets with regular removal of the pails, and many closets were erected. These have now however dropped into disuse, and are only used as tool sheds.

(4). There are two slaughter-houses. The buildings are quite unsuitable, but are kept perfectly clean, and apart from their entire unsuitability there is nothing objectionable about them.

(5). No system of meat inspection is carried out.

(6). No accumulation of filth was found, and there is no marked overcrowding.

(7). Rats are not prevalent.

(8). The sanitation of Greytown is primitive, but compared with other villages the inhabitants are unusually fortunate. The Council takes an interest in the subject, and the water courses are laid out with great ingenuity.

(iii) HERMANUSPETRUSFONTEIN (MUNICIPALITY).

*Report of Dr. J. J. HOFFMAN, Medical Officer of Health.

(1). Hermanus is supplied by a spring under the control of the Local Authority within the area of the Municipality. There is a reservoir at the spring, from which the water is conducted by pipes. Taps are placed in different parts of town.

The water is sufficient for present requirements, and is pure. The reservoir is surrounded by a stone wall about four feet high; it is the intention of the Municipality to make the wall higher, so that animals cannot jump over and fall into the reservoir, and so cause pollution of the water, otherwise the water is not liable to pollution.

(2). (a) Night-soil is collected in pails or paraffin tins, and disposed of by the sanitary contractor once a week. He buries the night-soil in pits some two miles outside the town.

(b) No regulation is as yet in force with regard to slop-water.

(c) The sanitary contractor carts household and other refuse to a site outside the town once a week. Householders must preserve such refuse in a box outside their houses.

(3). Besides Whooping Cough and Mumps and one or two cases of Erysipelas, there has been no outbreak of infectious disease. There was one Typhoid case at the Sanatorium—a lady coming with that disease from Wellington, and taking ill the day after arrival. She, however, rapidly recovered. There has been no further spread of the disease. No hospital exists in the place.

(4). Regulations for establishing public abattoirs are still waiting the sanction of the Government. Slaughtering is at present carried out in the backyards of the slaughter-houses.

(5). There is no meat inspection carried out.

(6). The carting away of household refuse by the Sanitary Contractor is one of the recent improvements in sanitation here.

(7). There are no rats in Hermanus or vicinity.

(8). Directly the Municipal regulations have received Government sanction and are in force there will be an improvement in sanitation generally.

(iv) STANFORD (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a spring near the village, and is conveyed in an open furrow. It is liable to pollution through cattle crossing the stream. Otherwise the supply is adequate and pure.

(2). Part of the night-soil is carried away and part is buried by the inhabitants in gardens. The same remarks apply to rubbish.

(3). No cases of infectious disease have been reported.

(4). The refuse from the slaughter-house is taken away daily.

(5). No inspection of meat is carried out.

(6). The Board does the best it can to keep the place clean.

(7). Rats are not known here.

(v) VILLIERSDORP (MUNICIPALITY).

(1). The water-supply is derived from two sources: The northern part of this town is supplied from the Elands River, taken out at a point near the boundary near the Commonage, and conveyed by means of a furrow; the southern part obtains its supply from a spring arising in Aasvogelkop, adjacent to the Commonage, and also conveyed in a furrow to this part of the town. For domestic drinking purposes the water has to be obtained from open furrows running through the town. But there is a proposed water scheme to bring all water for drinking purposes out of the Aasvogelkop by means of pipes; this is expected to commence shortly.

(2). There is no regular system in vogue. For the collection and disposal of (a) night-soil the bucket system is adopted and carried out in a fairly systematic manner, the excrement being finally deposited on private ground adjoining the Commonage, and situated near the Elands River, below the point at which the water is taken out for the town. (b) The manner of disposal of slop-water and (c) household and other refuse leaves much to be desired, it being left to the option of the occupier whether such refuse be removed or deposited on the erf or garden.

(3). Since last report only two cases of Typhoid were reported. No Hospital accommodation has been provided for such cases.

(4). Beyond the cleansing of water furrows and instructions to householders to keep their premises and erven clean, no further steps have been taken to remedy sanitary defects, or to remedy or limit the recurrence of preventable disease.

(5). The presence of rats in this town has not been brought to the Council's knowledge.

(6). No Health Officer is employed by the Local Authority.

CALVINIA.

(i) CALVINIA (MUNICIPALITY).

(1). The water-supply is obtained from shallow wells. The supply is abundant, and the wells are very numerous, being distributed throughout the entire Municipal area. They are, without exception, the property of private owners.

The water is necessarily liable to pollution. The Local Authority insists on the wells being enclosed and periodically cleaned.

(2). The Municipality itself superintends the removal of night-soil in a proper sanitary cart. The night-soil is buried at a considerable distance from the village, and at a spot where it cannot possibly contaminate the water supply. This department is under the charge of an official, who also reports any premises in an insalubrious condition, when steps are immediately taken to see that the same is rectified. The buckets at present in use are not uniform, but proper sanitary pails are about to be supplied by the Local Authority.

There is no provision made for the disposal of slop-water.

Household refuse is removed by the Municipal Authorities at public expense. Other refuse, when notified or reported by the inspector, is compulsorily removed by the authorities at the expense of the responsible party.

(3). No cases of infectious disease have been notified, nor has an infectious diseases hospital been provided.

(4). There are no public abattoirs at present, but as soon as the Municipal regulations are approved, one will be provided. At present slaughtering is done at a spot on the outskirts of the Municipal area.

(5). No system of meat inspection is carried out.

(6). No action, beyond insisting on all yards being kept perfectly clean, has been taken during past year.

Overcrowding is not prevalent.

(7). Rats have lately appeared in one or two buildings. Private energy has largely reduced their numbers, but they are not yet exterminated. No public action has been taken.

(8). The nature of the water-supply and the indifference of the public render many desirable sanitary reforms difficult of execution.

(ii) BRAND VLEI (VILLAGE MANAGEMENT BOARD).

(1) Water is obtained from the Zak River by means of a furrow leading to the dam at flood times, but this supply is irregular, and hence inadequate. Some wells supply the place for the rest, which are brackish, but when kept clean, not unhealthy. In very dry seasons some drinkwater is brought from wells dug in the bed of the river, about half-an hour from the village.

(2). As the dwelling-houses are thinly scattered over a spacious area, each owner has more or less his own system of collection and disposal of night-soil, slop-water, and household and other refuse in a manner to be approved of by the Board. The place is of a very dry nature.

(3) No infectious disease has prevailed during the period this report covers. No hospitals exist here.

(iii) LOERIESFONTEIN (VILLAGE MANAGEMENT BOARD).

The Village Management Board was inaugurated here during the month of July, 1904. The Cape Police stationed here were appointed to see that the sanitary regulations of the Board were duly carried out.

(1). No public water scheme exists. The supply of water is drawn from wells, all of which are situated within the village area, but are not under control of the Board, being private wells. The water is simply drawn up in buckets as needed. The supply is adequate, and though all the water is more or less brackish, it does not seem to be detrimental to health. The majority of the wells are covered in, and are not liable to pollution.

(2). No system of collection and disposal of night-soil, slop-water, or household and other refuse has as yet been put into practice by the Board. At present each householder looks after the disposal of the same.

(3). For the period under report no infectious disease has prevailed. No special steps have been taken for preventing any dealing with outbreaks of same, nor has any infectious diseases hospital been provided.

(4). No public **abattoirs** are established here, nor do the Board at present contemplate doing so. Each family slaughters its own sheep or goats, as needed.

(5). No system of meat inspection is carried out.

(6). The regulation in regard to the building of proper closets has been enforced, and a scheme for removal and disposal of night-soil, etc., is under the consideration of the Board.

(7) There are no rats in the District.

CAPE.

(i) CAPE TOWN (MUNICIPALITY).

* Report of Dr. A. JASPER ANDERSON, Medical Officer of Health.

(1). The sources of the Cape Town water-supply are from springs on the north-west of Table Mountain, and the catchment area on the summit thereof. The springs are within the Municipality, but the catchment area is not. The water flows from its sources through pipes to the Reservoirs Nos. 1 and 2, and to the Molteno Reservoir.

The water from the springs which are being used at present is exceptionally soft, and on analysis is found to be of great purity. The water from Table Mountain is discoloured through a quantity of vegetable matter being held in solution. As far as possible each house has a covered galvanised iron tank for the storage of water, and in order to prevent waste the system known as the "dribble system" is in use. This consists of placing on the supply pipe to the cistern a pipe with a small orifice, which can be regulated, so as to deliver a certain amount of water during the twenty-four hours, thus 100, 220 or 400 gallons, as the case may be.

The dangers and inconveniences of this system have been repeatedly pointed out, and in fact are admitted by everyone capable of forming an opinion, so that it is unnecessary to again make mention of them.

The water is stored on Table Mountain in the Woodhead Reservoir, capable of containing 225 million gallons, and the Hely-Hutchinson Reservoir, with a capacity of 200 millions. The portion of the City at high level is supplied by mains which are filled from a small service reservoir, called the Mocke Reservoir, on Kloof Nek, the water to which is sent from the Woodhead Reservoir.

(2). Provision has been made for the removal of all sewage matter on the water carriage system by means of well constructed sewers with an outfall into the sea at Green Point. A few houses in isolated positions are not connected with sewage sewers. Rain and surface waters are carried by storm-water sewers into Table Bay, and this system is now completed.

Household refuse is removed daily and is carried by rail to reclaimed land beyond Durban Road Station. There is a necessity for a small destructor for the destruction of specially infectious material, and especially unsound food, to prevent the same being consumed after seizure. The scavenging of the City has now been undertaken for several years by the Council itself.

(3). During the half-year ended 30th June, 1904, 332 cases of infectious disease were notified, particulars of which will be found in report furnished for that period.

During the half-year ended 31st December, 1904, 343 cases of infectious disease were reported, namely:—

Tuberculosis, 198; Enteric Fever, 51; Scarlet Fever, 38; Diphtheria, 41; Small-pox, 1; Erysipelas, 9; Membranous Croup, 3; Puerperal Fever, 1; Leprosy, 1.

During the year 1905, 647 cases of infectious disease were reported, namely:—

Tuberculosis, 397; Enteric Fever, 85; Scarlet Fever, 41; Diphtheria, 43; Small-pox, 22; Chicken-pox, 2; Erysipelas, 32; Membranous Croup, 5; Puerperal Fever, 17; Leprosy, 3.

Hospital accommodation has been provided, viz.:—One Pavilion of two Wards, containing six beds and two cots each, and an Observation Block of three Wards, each with three beds.

(4). At present there are no public abattoirs in Cape Town, but public abattoirs are contemplated in conjunction with the other Municipalities.

No slaughtering is allowed to be carried out within the Cape Town Municipality.

(5). The City has been divided into Inspection Districts, and it is the duty of each District Inspector to regularly inspect the butchers' shops, as to the soundness of meat exposed for sale, and for the cleanliness of the shops.

Any suspicious, unsound or diseased meat is kept under observation until examined by the Medical Officer of Health.

(6). House to house inspection has been carried out during 1904 and 1905, about 77,260 and 58,219 inspections being made, respectively.

(7). Three rat-catchers were employed during 1904 and 1905, catching rats on premises known or suspected to be infested with rats, with occasional additional assistance. A payment of 6d. is made to anyone bringing rats to the Fish Market. The number of rats destroyed during these years was 21,470 and 27,582, respectively.

(ii) GREEN POINT AND SEA POINT (MUNICIPALITY).

*Report of Dr. GEORGE A. BATCHELOR, Medical Officer of Health.

The suburban area of Green Point and Sea Point, under the control of the Green Point and Sea Point Municipality, has an area of 1,330 acres, of which 830 acres are occupied by a population of 8,840.

The population, according to the last Census, was made up as follows:—European, males, 3,902; European, females, 3,576; European, total, 7,478. Coloured, males, 470; Coloured, females, 892; Coloured, total, 1,362.

During the period under review 166 new houses have been erected.

(1). The water-supply is obtained from the reservoirs on the slopes of Table Mountain, and is under the control of the Cape Town Corporation, and is situated outside the Municipal area. The water is supplied by means of underground pipes, and is distributed to each householder by means of the dribble system, the water being stored in galvanised iron tanks. The water supplied during the period under review has been adequate for the requirements of the area, and has been of fair quality; no case has been brought to notice of the water-supply being polluted to the detriment of the public health.

(2). The water carriage scwage system is in use in the District, every house being connected with the Municipal drainage system, which has its outfall into the sea off the sea front, near the centre of the portion of the District known as Sea Point.

The house refuse is collected daily by means of carts with covers and is tipped into the sea near the sewer outfall, and has resulted in the removal of 9,291 loads during the eighteen months.

Road scavenging is carried on every day, Sundays included, and has resulted in the collection and removal of 10,245 cart-loads, a large proportion of which is used in the formation of a sea front esplanade.

(3). During the eighteen months fifty-eight cases of infectious disease were notified as occurring within the area.

The incidents were as follows:—Enteric Fever, 16; Diphtheria, 7; Scarlet Fever, 13; Erysipelas, 2; Tuberculosis, 20.

A case of Enteric Fever, notified in December, was an imported case from the Eastern Province. No notifiable disease has been prevalent in anything like an epidemic form.

In each case of notified disease the house has been visited by myself and my Inspector. The premises have been examined, and, in the cases of Enteric Fever and Diphtheria, the drains have been tested, and in every case printed instructions have been left, setting forth instructions necessary for the prevention of the spread of the disease. In the case of school children, the schools have been notified, and at the conclusion of each case the premises have been disinfected.

(4). Arrangements have been made with the Cape Town Infectious Diseases Hospital for the reception of any case that cannot be properly isolated, occurring in this District, at a cost of 12s. 6d. per diem.

No public abattoirs exist in this District. There are no slaughter-houses of any kind.

The butcher shops are frequently inspected together with the meat exposed for sale. No case of diseased meat or unsound meat being exposed for sale has been brought under notice.

A large amount of sanitary work has been done by myself, my Sanitary Inspector and his Assistant during the period under review, including inspections of shops, bakehouses, laundries, schools, stables and yards, cowsheds and brick-fields. The total number of nuisances attended to during the eighteen months amount to 1,159. Two houses were closed as unfit for habitation.

Rats are prevalent more or less throughout the area, not, however, to any great extent. Their numbers are kept down by the use of traps. A certain number from time to time are sent up to the Government Bacteriological Laboratory for examination.

For the purpose of the Vital Statistics the population of the area is taken as 8,800. Probably the number of inhabitants of the District, judging from the number of new houses erected since the last Census, is considerably over 9,000.

During the year ended June 30th, 1905, 247 births were registered as occurring within the area, giving a birth-rate of 28·1 per 1,000 inhabitants. The distribution of births were as follows:—Europeans, males, 114; European, females, 104; total, Europeans, 218; giving a European birth-rate of 29·2 per 1,000 inhabitants.

During the half-year ended 31st December, 1905, 122 births were registered, giving a birth-rate of 27·7 per 1,000 inhabitants. Of these 45 were European, males; 59 European, females, total, Europeans, 104; giving a birth-rate of 28 for the half-year per 1,000 Europeans.

During the year ended June 30th, 1905, the Coloured births were 29, as follows: Coloured, males, 22; Coloured, females, 7; total, Coloured, 29; giving a Coloured birth-rate of 21·3 per 1,000 inhabitants Coloured.

During the half-year ended 31st December, 1905, 14 Coloured births were registered as follows:—Coloured, males, 5; Coloured, females, 9; total, Coloured, 14; giving a Coloured birth-rate of 20·3 per 1,000 inhabitants.

During the eighteen months ended 31st December, 1905, 14 illegitimate children were born in the District, mostly Coloured.

Deaths.—During the year ended June 30th, 1905, 67 deaths occurred within the area, giving a death-rate of 7·6 per 1,000 inhabitants.

The deaths were distributed as follows:—European, males, 29; European, females, 20; total, Europeans, 49; giving a European death-rate of 6·56 per 1,000 Europeans, and a Coloured death-rate of 13·2 per 1,000 Coloured inhabitants, distributed as follows:—Coloured, males, 8; Coloured, females, 10; total, Coloured, 18.

During the half-year ended 31st December, 1905, 36 deaths occurred within the area, giving a death-rate of 8·02 per 1,000 inhabitants. The deaths were distributed as follows:—European, males, 15; European, females, 12; total, Europeans, 27. Coloured, males, 6; Coloured, females, 3; total, Coloured, 9.

The European death-rate for the half-year was 7·2 per 1,000 Europeans, and the Coloured death-rate 13·1 per 1,000 Coloured inhabitants.

The deaths below one year during the year ended 30th June, 1905, were 16, giving a death-rate of 6·5 per 1,000 births. During the half-year ended December 31st, 1904, 14 deaths occurred of infants below one year, giving an infant death-rate of 11·5 per cent. of the births or 115 per 1,000 births.

CARNARVON.

(i) CARNARVON (MUNICIPALITY).

The water-supply is obtained entirely from wells situate in the village. Nearly every erf has a well on it. There are two wells situated on Municipal property, from which inhabitants who have no wells of their own obtain water for drinking purposes. A wind-pump has been erected at the Municipal well, facing the Market Square, and three large tanks fixed on a stand built of stone and cement. These are constantly kept full, so that the inhabitants obtain pure drinking water, and pollution cannot now take place as in former years with the small hand-pump system. Owing to the severe drought during 1904 and 1905, the supply was not sufficient, as almost every well, including the Government wells, failed, and deepening and blasting wells were the order of the day, and in the majority of instances without success.

(2). The same as in the last report.

[G. 39—1906.]

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(3). There has been an outbreak of Scarlatina, but in a very slight form, and as far as the Council is aware there was not a single case with fatal results. Dwellings where cases broke out were at once isolated, and necessary disinfectants supplied free of charge. There is no Infectious Diseases Hospital accommodation, but the Municipal Council has a number of bell tents which are made use of whenever infectious diseases, like Small-pox, occur.

(4) and (5). The Municipality has a public slaughter-house where all killing of sheep takes place, and from there the carcasses are removed to the different butchers' shops, which are kept very clean, and subject to weekly inspections. No diseased meat is sold, as far as the Municipality is aware, and no complaints have been made.

(6). All street and other refuse are removed daily by the sanitary cart, and in many instances householders remove their slop-water. There is, however, great difficulty in getting all the householders to remove such slop-water, especially amongst the poorer class. The location is inspected periodically, and where overcrowding occurs the inhabitants are warned and prosecuted. Dwellings that are unhealthy or dangerous to life are broken down.

(7). There are no rats in the town.

(8). The Council employs no Health Officer, but all cases of infectious disease are instantly reported to the Council by the Medical Practitioners.

(ii) VAN WYK'S VLEI (VILLAGE MANAGEMENT BOARD).

(1). There has been no change in sources of supply, the dam being the principal one. This is flood-water, and at times, when the water is low, is not fit for domestic purposes. The water from this source comes by open furrow, at times it is diverted to natural water courses, and the water is drawn from the "Kolks." Near the dam is a well, which supplies good fresh water, and forms the main supplies when the dam water is low.

At the village there is another well, but the supply is small, the water good, but slightly "brak." All these waters are under the control of the Bailiff here.

(2). There is no organised system; each householder removes and buries all refuse at a point some distance below the residences.

(3). There is no hospital or Medical man here.

During the year there were a number of cases of a mild sort of Scarlatina, but this came from outside. A wave of this complaint appears to have swept over the Division.

(4). Abattoirs are unnecessary, the population being small, and each family slaughters as they require meat.

(5). There is no meat inspection.

(6). From a sanitary point, no action has been necessary.

(7). There are apparently no rats in the place.

CATHCART.

CATHCART (MUNICIPALITY).

*Report of Dr. G. WHITESIDE ROBERTSON, Medical Officer of Health.

(1). Cathcart derives its water-supply from springs in the adjacent mountain, the Windvogelberg. The water is collected in the kloof by dams, stored in stone reservoirs, and distributed in pipes to the village. The supply is adequate for present requirements. The quality is excellent, but, as there is no filtration, in times of heavy rains the water contains an amount of suspended earthy matters.

The source is under the control of the Cape Government Railway Department, and lies outside the area of the Municipal authority.

(2). (a) The pail system is in vogue and a tri-weekly service has been established since the last report.

(b) The removal of slop-water is at present occupying the attention of the Council, and there is every prospect of a satisfactory system being instituted at an early date.

(c) Household refuse is removed weekly by the Municipal cart.

(3). During the period July 1st, 1904, to December 31st, 1905, the infectious diseases within the Municipal area included Small-pox, Diphtheria, Enteric Fever, Scarlet Fever, Measles, and Chicken-pox.

Four cases of Small-pox occurred at the Native Location. The patients and contacts were rigorously isolated, and vaccination and re-vaccination was extensively carried out. There is no Infectious Diseases Hospital, and the patients and contacts were housed in tents.

There were four cases of Diphtheria, three of Enteric Fever, and three of Scarlet Fever.

Towards the end of 1905 an epidemic of Measles broke out, and a great many children became infected.

(4). A public abattoir has been erected and the conditions under which slaughtering is carried out are much more satisfactory than of old.

(5). There is no meat inspection.

(6). The source of the water-supply and the course of the mountain stream have been fenced in and thus a very obvious source of pollution has been removed, as the kloof is used for cattle grazing.

The Sanitary Inspector has made frequent visits to suspicious habitations, and the occupants have been thus compelled to improve the sanitary condition of their premises.

(7). Rats have not been prevalent.

CERES.

(i) CERES (MUNICIPALITY).

*Report of Dr. G. C. MUNNIK, District Surgeon.

(1). The water-supply is very satisfactory and is derived from mountain springs under control and within the area of Local Authority, and delivered both by pipes and open furrow, the latter for irrigation purposes mainly. It is adequate and of pure quality.

(2). Night-soil is systematically removed by Municipal wagon and disposed of by burial outside the town; this system is not carried out in the Native Locations, where the night-soil is still being buried in the neighbourhood of the huts. Slop-water in most cases is made to dry up in the yard. Household and other refuse are carried away by Municipal cart.

(3). With the exception of an epidemic of Mumps, no infectious diseases worth mentioning prevailed. An occasional case of mild Diphtheria and Enteric were noticed.

(4). All abattoirs belong to private parties, and public ones are not contemplated. Those existent are situated on the veld outside the town, and are well conducted.

(5). There is no system of meat inspection in vogue; Colonial meat is mainly used, and a fresh wholesome quality is always on hand.

(7). No rats were observed.

(ii) PRINCE ALFRED'S HAMLET (MUNICIPALITY).

(1). The water-supply is from the Wagenbooms River, and from a spring, and is of good quality. It is conveyed to the village in open furrows. These furrows are cleaned by order of the Municipality, but the furrows are not paved with stones.

(2). There is no system of drainage. Night-soil, slop-water, household and other refuse are, as a rule, buried in the ground. There are several huts of the Coloured people, mostly outside the village. Very few privies are kept.

(3). No infectious disease has prevailed during the year; the general health was good.

(5). The butcheries are kept clean. No system of meat inspection is carried out.

(6). No other action has been taken to remedy any sanitary defects except the cleaning of the water furrows.

(7). No steps have been taken for the extermination of rats.

CLANWILLIAM.

CLANWILLIAM (MUNICIPALITY).

*Report of DR. ALFRED A. HAYES, Medical Officer of Health.

The past years have been on the whole healthy. With respect to the Municipal area, there have been no cases of Zymotic Disease, and only a few isolated cases of Enteric Fever in the district.

(1) The water-supply is from the Jan Dissels River, conveyed in an open furrow. The entire course is under the control of the Town Council. The water is generally pure, but very liable to pollution, owing principally to its lying on a lower level than the street, and no means have ever been adopted to restrict the drainage from pouring into it, which it always does in rainy weather.

(2). Night-soil, slop-water, household refuse, etc., are removed by a cart employed by the Town Council, and buried at a safe distance.

(3). There has been practically no infectious disease recently. There are no means of dealing with it, as there is no hospital for the isolation of cases of infectious disease, except that under the Contagious Diseases Act.

(4). There are no public abattoirs, and I do not know that any are in contemplation. Slaughtering is done by the local butchers in the open air at places appointed for the purpose by the Town Council.

(5) and (6). None.

(7). There are no rats, for some unexplained reason, in Clanwilliam. Mice abound in large numbers.

In my other Annual Health Report I recommended certain precautions with regard to the water furrow, with the idea of preventing pollutions. These were, raising an embankment along the furrow, and at intervals making drains to convey the stormwater over the furrow, thus largely limiting pollution. Further, the extension and repair of the existing wire fence in order to prevent cattle straying into the furrow.

I believe, however, steps are being taken to supply the township with water by means of pipes, and in that case the other procedure will be unnecessary.

COLESBERG.

COLESBERG (MUNICIPALITY).

(1). The water-supply is as previously reported. The supply is plentiful and pure, and not liable to pollution.

(2). No change in the system of removal of night-soil, slop-water, and household and other refuse has occurred during the last eighteen months.

(3). A few cases of Typhoid Fever occurred, and were duly notified to the Council. No Infectious Diseases Hospital has been provided.

(4). No public abattoirs have been established by the Council. The slaughtering of cattle and sheep is not allowed in the town. A spot, a good distance out of the town, has been pointed out by the Commissioners, where animals may be killed. Three private slaughter-houses have been erected there at a rental of 4s. per month for each stand.

(5). The Sanitary Inspector inspects the meat in the shops occasionally. In case of unsound meat being detected, the seller is at once prosecuted.

(6). The Commissioners do not know of any sanitary defects. Great attention is given to sanitary matters. The town is kept very clean. The Native Location is also regularly inspected.

7. Rats are not prevalent in this Municipality.

CRADOCK.

(i) CRADOCK (MUNICIPALITY).

(1). The water-supply is obtained from springs, eighteen miles from town, and brought in by pipes, and supplied to the public in their houses.

The present supply is limited, but it is the intention of the Council to increase the same.

(2). Scavenging and the disposal of excrement are done by the pail system daily, if required, and carried out by the Municipality, all removals being covered over daily and lime used.

Household refuse is removed weekly or oftener by the Council, and disposed of outside the town or in the filling in of sluits.

(3). There are no cases of any infectious diseases to report.

(ii) MARAISBURG (MUNICIPALITY).

(1). This matter was fully reported in 1902, and remains exactly the same.

(2). The *modus operandi*, described in the report of 1904, is still being adhered to, and the Council has as yet not made any alterations therein.

(3). No case of infectious disease has been brought to the notice of this Council since the last report.

(4). Two shambles have been erected outside the village by the Council, where the local butchers are compelled to slaughter their sheep, and the like.

(5). No system of meat inspection is being carried out by the Council.

(7). The extent to which rats are prevalent within this Municipality has not been such as to require the attention of this Council.

(8). No Medical Officer is permanently employed.

EAST LONDON.

(i) EAST LONDON (MUNICIPALITY).

*Report of Dr. D. M. MACGREGOR, Acting Medical Officer of Health.

(1). An interim scheme to further augment the present supply from the Buffalo River has been instituted since the previous report of the Municipal Health Officer (Dr. R. J. Roulston), and will shortly be completed, thereby enabling the town to be supplied with 750,000 gallons per 24 hours. Further, the Local Authority is presenting a Bill to Parliament next Session regarding a contemplated permanent scheme drawn up by Mr. Charles Anthony, jun., M.I.C.E., for the provision of an exceptionally pure and adequate supply from the Wolf-Gulu Rivers, situate about 50 miles from East London, in the King William's Town Division, at an estimated cost of £300,000.

(2). Night-soil, slop-water, and household and other refuse. There is no change in the collection and disposal of all such since Dr. R. J. Roulston last reported.

(3). Infectious disease.—The following is a comparative list of the cases notified during the past two years:—

	1905.		1904.
Enteric Fever... ..	89	as compared with	90
Diphtheria	4	„ „ „	28
Scarlet Fever	10	„ „ „	8
Small-pox	1	„ „ „	18
Plague	47	„ „ „	9

These were duly enquired into by the Sanitary Inspector as soon as notified, and, where necessary, by the Medical Officer as well, and in all instances where sanitary defects were discovered at or in the vicinity of the premises where cases occurred, steps were at once taken to have them remedied.

The Sanitary Inspection Staff further saw that each case nursed at the house was isolated as far as possible, and, as far as practicable, that all precautions against the spread of the disease were taken.

Special nightly removals of excreta, etc., from premises where Enteric, Diphtheria, and Scarlet Fever cases were being nursed, were carried out free of charge, and where the householder was unable to pay for disinfectant that was also supplied gratis.

Special attention was also given to the disinfection of street gutters in the vicinity of cases of infection.

Most of the Enteric Fever cases were removed to the Frere Hospital for treatment; the Small-pox cases were dealt with at the Lazaretto. The Plague cases were taken in hand by the Government Plague Administration Staff, who likewise attended to all precautionary measures being carried out in relation thereto.

There is no infectious diseases Hospital other than the Lazaretto, where the Plague and Small-pox cases were treated.

(4). Abattoirs.—The Local Authority does not at present contemplate establishing an up-to-date abattoir, it already having six Municipal slaughter-houses available for letting to butchers. However, only two of them have been hired by butchers during the past eighteen months, consequently a great deal of the killing and dressing for this town's meat supply has been done outside the Municipality, which points to a need of more extended powers for centralising and bringing the slaughtering under more direct supervision.

(5). Meat Inspection.—As heretofore mentioned, there are only two slaughter-houses in use within the limits of the Municipality, and these are visited daily.

The butchers' shops throughout the town are visited at least once a week, and the meat tables on the market every morning by one or more of the Sanitary Inspection Staff, two of whom at a time are specially detailed for this duty, and the others including the Health Officer supplement their efforts from time to time.

During 1905 211 lbs. of measly pork and 111 lbs. of unsound beef, etc., were seized and destroyed in terms of the Municipal Regulation, and two prosecutions followed, resulting in a penalty of £5 in each case.

(6). Action taken to remedy sanitary defects.—The matters referred to under this heading received continued and constant attention. Innumerable nuisances were abated, and a great many necessary improvements effected as a result of written Notices served upon those responsible.

The enforcement of the Municipal Regulation relating to Asiatics and Natives residing within the town limits has been productive of much good, decreasing, as it has, the amount of overcrowding that formerly obtained amongst both classes, and otherwise improving sanitary conditions generally; but there is still much to be done in that direction as regards the Asiatics, for the majority of them claim protection from any such restriction without conforming to the requirements of the special Act affording them exemption, and this matter will have to continue to be decided through the Courts, as occasion arises, for the general good of the community.

Insanitary areas in and around the town were cleared of weeds, rubbish and filth, and increased provision made for meeting the sanitary requirements of Natives passing to and from the Locations.

The weekly night-soil service (daily when required), and the bi-weekly removal service for rubbish and trade refuse (more often where considered necessary), keep the habitations well free from accumulations of filth and noxious matters.

(7). Rats. The very satisfactory work carried out by the Government Plague Administration Staff considerably reduced the number of rats in this area, but rats will likely become prevalent again, unless it is arranged for a small staff to be maintained at this and other sea-port towns in the Colony for the purpose of continuing systematic and persistent efforts at their destruction.

The Local Authority has taken no special steps for extermination of same, that duty having been undertaken and carried out as above stated.

(8). Health and Sanitation.—The health of the town, including Locations, has continued good during 1905.

With the exception of Plague, there were fewer cases of infectious disease, notably Diphtheria and Small-pox, than in 1904, and there have been no cases of the first mentioned since the month of July, 1905.

The Municipality was free from Small-pox until the month of December, when a case was introduced from Tylden, which resulted in two local cases in the same house before the disease was stamped out. No effort was spared in safeguarding the public against the spread of infectious disease, and the system of house to house inspection by the Sanitary Inspection Staff was continued during the year with beneficial results.

Apart from the outbreak of Small-pox in 1904, there is nothing for that year calling for special mention in this report.

Bakeries, milk shops, dairies and cowsheds, aerated water and ginger beer factories, etc., were also regularly inspected, with the result that a general all-round improvement was effected in the condition of same.

Amongst other improvements and additions, a culvert was constructed for dealing with the drainage passing through the Park, which formerly was a great source of nuisance.

The street gutters are cleansed and disinfected daily, many of them being also flushed with salt water, but nothing in the way of further improvements can be effected for more properly dealing with drainage or sewage throughout the town, other than by means of a comprehensive underground system, after sufficient water becomes available for flushing purposes upon the completion of the permanent water scheme.

(ii) AMALINDA (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from surface and river sources, is of fair purity, and is adequate for the needs of the residents.

(2). No system has as yet been established for the disposal of night-soil and other refuse, as the majority of the residents have at least a four acre plot of land in which to dispose of such refuse. This causes no inconvenience.

(3). This area has been remarkably free from infectious disease. Only one outbreak of Bubonic Plague occurred in 1905. The cases were removed to the East London Plague Camp, together with all contacts, and the hut burned. There is no Hospital accommodation in this area.

(4). The Board has not established any public abattoirs, and do not contemplate doing so. Slaughtering is at present carried out on private property subject to the Board's Bye-Laws.

(5). There is no inspection of meat.

(6). A committee of the Board has made inspections of several insanitary places, and where any defects existed they were immediately remedied.

(7). In 1904 rats were very numerous, they have now decreased considerably. No steps have been taken for their extermination.

(iii) CAMBRIDGE (MUNICIPALITY).

*Report of DR. K. B. ALEXANDER, Medical Officer of Health.

(1). The water-supply is dependent on the rainfall which is collected from roofs of houses into tanks. The Council has been engaged on this important question throughout the period under review; borings for water have been undertaken without success, and other sources of local supply have been considered only to be put aside. It is abundantly evident that the proper course for this Municipality to adopt in this matter is to combine with East London, and derive their supply from the Gulu-Woolf scheme shortly to be submitted to Parliament.

(2). Night-soil is collected weekly, and buried in trenches at a suitable place.

Household refuse is also collected weekly, and deposited on sites selected for the purpose.

Slop-water.—There is no systematic removal of slop-water, every householder has to make his own arrangements. In the more populated parts of the town nuisances consequently arise from time to time, especially when householders allow slop-waters to drain continually into the same area of ground, which becomes fouled. Steps are taken to remedy this evil by compelling people to put an end to said nuisance by distributing slop-water in gardens and adjacent portions of veld.

A system of collection is desirable, but is difficult to carry out at a reasonable cost owing to the scattered area and population. The matter is receiving consideration.

(3). There have been two cases of Scarlet Fever, four of Typhoid, eight of Diphtheria, and one of Erysipelas.

The usual steps have been taken in the way of isolation and disinfection with satisfactory results.

There has been no need for Hospital accommodation. All the cases of Typhoid Fever were imported from East London, two being males employed in East London. None of the other members of households residing in Cambridge were affected. The remaining two were children brought to Cambridge in a state of fever, the parents having changed their residence from East London.

Diphtheria occurred in five houses widely separated. I am of opinion that seven of these cases arose from defective sanitary arrangements. The Council should enforce regulations with regard to proper receptacles being provided for household refuse.

(4). There were four licensed abattoirs. Two of these have been closed owing to failure to fulfil Municipal sanitary regulations.

(5). There is no inspection of meat.

(6). Steps have been taken to prevent overcrowding which existed amongst Native population with good results.

Building regulations are now enforced.

(7). Rats are not present to any extent, and no steps are necessary for their wholesale extermination.

(8). A Native Location has been established, which is satisfactorily managed.

Natives are still however allowed to squat amidst the white population, many of them still live in huts, especially in area known as Clifton.

Their number has considerably diminished recently owing to enforcement of regulation *re* overcrowding and other sanitary regulations.

It is, however, extremely desirable that the entire Native population should be made to reside in a Location, for besides being a source of danger to the public health, they are a menace to the white population, and require the maintenance of a special police force.

The Government should sanction and assist Council to carry this into effect.

Fort Beaufort.

(i) Fort Beaufort (Municipality).

*Report of Dr. W. DUNCAN MILLER, Medical Officer of Health.

(1). The water-supply throughout 1904 continued in the condition described in former reports. The source of the supply is the Kat River at Blinkwater, six miles above Fort Beaufort. It is without the area of the Local Authority. The water was conveyed into the town by an open furrow, and was entirely open to contamination along the whole length. A large proportion of the water was lost also by leakage. In times of drought the town suffered severely from the scanty supply of water, and in 1904 the Municipal Council adopted a scheme for an improved water supply. This was carried out in 1905 at a cost of £13,000. A weir was built across the Kat River, and a nine inch cast-iron pipe line laid from the intake at the river to the town. The water-supply is now abundant, free from pollution, and placed beyond the influence of any but an extraordinary drought. On the town extension, half a mile from the town, the water for domestic purposes passes through filter beds, which have been recently cleaned and put into thorough repair. The public health had benefited by the carrying out of this scheme, and the Council can be congratulated upon the success which has crowned their labour.

(2). The bucket system has been fairly well adopted throughout the town, and removal of night-soil is regularly carried out by private contractor, who also removes the household and other refuse. Slop-water is dealt with by the occupiers of houses, and is generally thrown into holes dug in garden ground.

(3). Infectious disease has not prevailed to any great extent. Enteric Fever has been reported in five or six cases, three of which however were imported into the town. One or two cases of Diphtheria also have been reported. In 1905 two cases of Plague were discovered in the town Location. The men had arrived the previous day from East London, had been examined by the Medical Officer of Health, and placed under observation. One man who suffered from Pneumonic Plague, was too ill to be removed, and his hut was placed in quarantine. He died within forty-eight hours of his arrival in town. The other case was removed to a temporary plague camp till his removal to the Plague Hospital at East London. Thorough disinfection was carried out, and there was no spread of infection. During the epidemic of Plague at East London and King William's Town, the Medical Officer examined all Native passengers from these towns on their arrival by train. No infectious diseases Hospital accommodation exists, beyond two huts which have been erected by the Council for use in any sudden emergency.

(4). The Local Authority has not established any public abattoir, nor do they contemplate doing so. There are three abattoirs near the town, and these are inspected by the Sanitary Inspector.

(5). Meat exposed for sale is examined by the Inspector. On several occasions meat has been condemned on report of the Sanitary Inspector and Medical Officer, and within the period covered by this report, one prosecution was undertaken, and a conviction obtained.

(6). Reports made to the Council by its Inspector are considered and dealt with. If the public health seems to be threatened, a further report is called for from the Medical Officer. Notifications to the persons complained against have been followed by rectification of the sanitary defects discovered by the Inspector.

(7). Rats are not very prevalent, and since the warning issued to the public during the epidemic of Plague in East London, a good deal has been done by private individuals in the way of destroying rodents.

(ii) HEALD TOWN (VILLAGE MANAGEMENT BOARD).

The Locations under the Board number six.

There has been no epidemic of any infectious disease during the period under report. The Board employs no Medical Officer, but in the event of any outbreak of disease of an epidemic nature, the District Surgeon of Fort Beaufort is employed by the Board.

During 1904, 116 births were registered and 66 deaths.

During 1905, 110 births were registered and 57 deaths.

One case of Typhoid Fever occurred during 1905.

(iii) BLINKWATER (VILLAGE MANAGEMENT BOARD).

No report furnished.

FRASERBURG.

(i) FRASERBURG (MUNICIPALITY).

*Report of DR. P. MADER, Medical Officer of Health.

(1). The water-supply is derived from a spring and bore-holes, situate at the south-west of the town, and within the Municipal area. It is under the control of the Local Authority. For domestic purposes the supply is ample, and the water pure at its source. A wind pump has been erected, which pumps the water into a galvanised iron tank, from which it is drawn when required. The surplus runs down in an open furrow through the town, and is used for irrigation.

(2). Night-soil is collected in sanitary buckets, and the disposal is under the supervision of a Sanitary Inspector. Slop-water is disposed of in back yards, and household refuse is removed in the Municipal cart.

(3). There was an outbreak of Chicken-pox in the Location last October. Owing to a difference of opinion as to the nature of the disease between the local medical men, the Government insisted that the outbreak should be treated as one of Small-pox. A Lazaretto was consequently established, and the contacts and patients, forty in all, isolated for a period of six weeks at a cost of £170. One death occurred, that of a new-born weakling. All the others were of a mild form, and recovered within a period of from five to seven days. Vaccination had no effect either in modifying or checking the disease.

In other respects the town was remarkably free from infectious disease during the eighteen months. There is no Hospital for such diseases; and nothing is done by the Local Authority for preventing and dealing with such outbreaks.

(4). Public abattoirs have been established years ago, and are clean and well kept.

(5). There is no system of meat inspection. All meat consumed is reared in this District, and there is no suspicion that diseased or unsound meat is sold to the public.

(6). There are no overcrowded dwellings, or such as are unhealthy or dangerous to life. The supervision of sanitary matters is, on the whole, satisfactory.

(7). Rats are not prevalent here.

(ii) WILLISTON (MUNICIPALITY).

(1) The town derives its water supply from the three following sources:—

(a) The old supply as obtained from an open well or spring. The supply is adequate, and the water is pure, but owing to a servitude on same the spring cannot be covered, and is very liable to pollution. This supply is now not used for drinking purposes.

(b) A hand pump fixed in a bore-hole supplies an adequate supply of pure water which cannot be polluted, but its distance from the town prevents its being used as much as it ought.

(c) The present principal supply of water derived from a covered well, conveyed by means of a wind pump and pipes to a reservoir in town, is pure and unpolluted. The reservoir, etc., is at present being built, and the scheme will shortly be completed.

- (2). (a) Night-soil is disposed of in cesspools outside the limits of the town.
- (b) Slop-water is disposed of at places specially appointed.
- (c) Household and other refuse are privately disposed of at places appointed.
- (3). No infectious diseases have been reported.
- (4). No public abattoirs have been established. Slaughtering is carried on in private slaughter-houses.
- (5). No system of meat inspection is carried out. There are only two butchers, most of the inhabitants doing their own slaughtering.
- (6). The spring, the water of which is approachable, is regularly cleansed, as also are the wash places. Streets are regularly cleaned, and private premises are inspected by the Sanitary Inspector, who, on finding any insanitary, orders same to be cleaned, and on failure of doing so prosecutes. Overcrowding is common, but impossible to prevent.
- (7). Rats are unknown here.

GEORGE.

(i) GEORGE (MUNICIPALITY).

- (1). There has been a sufficient supply of water throughout the year, a good stream running in the furrows night and day. The furrows are constantly cleared of any matter that occasionally may fall in them, and are thoroughly flushed at times.
- (2). No alteration has been made in the system of removing night-soil, slop-water, as the extent of ground, mostly cultivated, attached to each house, offers insufficient room for such deposits. House refuse not suitable for manure is destroyed by fire.
- (3). The town and environs have been free from any infectious diseases.
- (4). Private people often kill a pig near their houses. Slaughter-houses of licensed butchers are on the outskirts of the town.
- (5). The meat sold on the market is examined by the Sanitary Inspector. Butchers' shops are regularly visited by him, and unsound meat he has had buried. Owners of fish carts vending diseased fish in town have been fined by the Magistrate.
- (6). The Municipality having no building regulations, the houses mostly of Coloured people are too small as a rule for the number of their inmates, with mud floors often very damp, scanty ventilation, and an hereditary tendency thereto, it is no wonder that the medical notifications for the last eighteen months contain a great number of the mixed race as suffering from Phthisis.
- (7). Since the Plague regulations came to an end the rats have been left at peace. They must have been well reduced in numbers, as they are seldom seen or heard of.

(ii) PACALTS DORP (VILLAGE MANAGEMENT BOARD).

- (1). The water-supply for domestic purposes is permanent, pure, and ample, and is obtained from a spring in the village under the control of the Board. The water is conveyed from the spring in a pipe for about fifty yards, and then discharges itself into a cement tank (covered in), and from there water is supplied to the inhabitants from a tap in the tank, and this is done under the supervision of the Water-overseer.
- (2). There is no system for the disposal of night-soil, slop-water or household refuse. The inhabitants themselves dispose of these things privately and properly.
- (3). Only a few cases of infectious diseases were reported during the year, and these were privately attended to under the supervision of the Board's Officers. The Board do not possess an Infectious Diseases Hospital.
- (4). As no public abattoirs exist within the Board's jurisdiction, no action is required herein.
- (6). No action has been taken to remedy any sanitary defects, as it was found not necessary to act.
- (7). No complaints have been made as to the prevalence of rats.
- (8). No Health Officer is employed.

GLEN GREY.

LADY FRERE (MUNICIPALITY).

(1). The source of the water-supply is on No. 2 Location Commonage, from whence it is conducted to village in open furrow.

For domestic purposes the Municipal Council has during the year 1905 put down two bore-holes within the village, and have erected pumps. The supply from this source is plentiful.

(2). Night-soil and other refuse are removed by private contract.

(3). During 1904 no infectious disease occurred. In 1905 an outbreak of Small-pox occurred in the Municipal Native Location. No infectious diseases Hospital has been established.

(4). There are no public slaughter-houses. Butchers kill on their own property.

(5). Meat inspection is not found to be necessary.

(6). All cesspools have been closed as provided in the regulations.

(7). Rats give no trouble. Very few are found in stores.

(8). A Health Officer is employed only when occasion requires.

GORDONIA.

(i) UPINGTON (MUNICIPALITY).

(1). The water-supply has its source from the Orange River, outside the area of the Local Authority, and is conveyed for domestic and irrigation purposes in a large open furrow. This furrow is under the direct control of the Upington Waterworks Company, Limited, and upon this Company the town is dependent for its water-supply. The water furrow being immediately below the township on a lower level, every particle of refuse and dirt is blown by the winds and washed by the rains into the water furrow, and were it not for the bulk of water in the furrow serious diseases would already have resulted. But irrigable lands above the township are increasing in size, and consequently the bulk of the water is diminishing. The township is filling up, and the sources of pollution are also increasing with deadly surety. The day is fast approaching for the Council to construct proper waterworks above the township, but where are the funds to come from for so important and necessary a work, as the sources of revenue at present are hardly sufficient to cope with the expenditure.

(2). (a) A bi-weekly removal of night-soil by the Council's contractor is now in force.

(b) Slop-water, is unfortunately, still removed by individual householders.

(c) Household refuse is removed by the Council's contractor, and the work of removal is being done very satisfactorily.

(3). The general health of the town was fairly good during 1905.

Infectious disease has been practically unknown. A few cases of Enteric Fever have occurred, and these have been at once isolated at their homes, and every precaution taken to prevent spread. There is no isolation Hospital for infectious diseases.

(4). No abattoirs have been established by the Council within the township, nor do they contemplate doing so at present. All slaughtering is done outside the limits of the township proper.

(5). No system of meat inspection is carried out within this Municipality.

(6). The pollution of water and accumulation of filth are not permitted, and the action adopted by the Council to remedy such sanitary defects is, after due notice has been given, to report the matter to the Police with the view of bringing the offenders to justice.

(7). No rats are prevalent in this township.

(ii) KEIMOES (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from the Orange River main stream, and is diverted by dams for irrigation and domestic purposes.

(2). A proper system has not been carried out as to sanitation.

(3), (4) and (5). Nil.

(6). The regulations of the Board are enforced.

(7). There are no rats in the Board's area, nor, as far as is known, in the whole District.

No Medical Officer has been employed by the Board, but the District Surgeon pays visits casually to the village.

GRAAFF-REINET.

(2) GRAAFF-REINET (MUNICIPALITY).

*Report of Dr. J. M. KEEGAN, Medical Officer of Health.

(1). The arrangements for supplying this town with water have not been altered or improved since my last report.

The concrete dam, built across the river, immediately below the origin of the lower furrow, has not increased the amount of water taken into town by this furrow except when the river is in flood.

The water-supply during the Winter months is sufficient for the supply of the town, but in the Summer is wholly inadequate.

(2). The arrangements for disposal of night-soil, slop-water, and household refuse remain the same as described in my last report.

(3). The town was visited during the past year by epidemics of Whooping Cough, Chicken-pox, Scarlatina, and Measles. Enteric Fever is endemic.

There were no cases of Whooping Cough or Chicken-pox reported to me, and there was no mortality from either of these diseases.

There were twenty-five cases of Enteric Fever reported, with two deaths, one European and one Native.

There were three cases of Scarlatina notified, none of which died.

There were eleven cases of Measles reported, with one Native death.

The number of cases notified of Measles and Scarlatina by no means represents the extent of the epidemics of these diseases. A considerable number of children received no medical treatment, the parents not considering it necessary to consult a medical man on account of the mildness of the disease.

There was one mild case of Small-pox, which was removed to the Lazaretto and recovered.

Cases of Enteric Fever are received into the Midland General Hospital, but there is no special Hospital for acute infectious disease.

The Lazaretto, which was used for Small-pox cases, was completely destroyed by fire last year, and has not been re-built.

In this connection, I desire to report that the Committee of Management, acting on the advice and suggestion of the Medical Officer of Health for the Colony, has entirely re-organised the working of the Midland Hospital.

All the cess-pits in connection with the Hospital have been filled up, and the pail system for the removal of night-soil and slops introduced.

The Superintendent and Matron, who received a salary of £350 per annum, with extras, were superannuated, and a Matron at £80 per annum appointed. The house staff at present consists of a Matron, two trained nurses and a probationer, with a day male attendant. A dispenser attends three times a week on receiving days to make up medicines for in and out patients, any emergency prescriptions are made up by the Visiting Medical Staff.

The new system has proved in every way satisfactory. The number of in-patients has increased considerably, and the cost per head has considerably decreased. The expenditure would have been still further diminished had it not been necessary to erect new buildings, and provide for the additional cost of removing the sanitary pails.

(4). Public shambles, where all slaughtering is done, have been established for many years. They are outside the town on the south bank of the river, and quite twelve hundred yards from the nearest house.

Every butcher slaughters his own stock, and efforts are made to keep the place as clean as possible. An absolutely satisfactory condition of affairs cannot be attained until the supply of water is much augmented.

(5). Every butchers' shop in town is visited at intervals by the Medical Officer of Health. On no occasion during 1905 was it found necessary to condemn meat exposed for sale at the shops.

The meat sold on the market is examined every day by the Chief Sanitary Inspector before the market opens. If the Sanitary Inspector is in doubt as to the soundness of any meat, the sale of this meat is stopped, and the Medical Officer of Health is sent for. The latter, if he consider that the meat is unfit for food, directs that it be removed and destroyed.

On only four occasions during 1905 was it necessary to condemn meat exposed for sale on the market. In no instance was the offender prosecuted.

(6). Nothing specially has been done since my last report.

(7). Rats and mice are still found in town, but not in large numbers.

Annexed is a tabulated statement, giving the number of deaths and the causes of death for the year 1905, both for Europeans and Natives.

The European mortality table can be regarded as giving correctly the urban death-rate, as all cases of death among Europeans from outside Districts have been omitted.

The Native table, however, is only approximately correct on account of the shifting character of the Native population.

There were one hundred and sixty-two European births during the year, two of which were illegitimate, and there were eleven European deaths, under one year, so that the infantile mortality was 67·8 per thousand.

There were two hundred and forty-three Native births, one hundred and twenty-five of which were illegitimate.

There were eighty-seven Native deaths under a year, so that the Native infantile mortality was 358·08 per thousand.

The infantile European mortality for 1905 has been decidedly low, while the Native infantile mortality remains very high.

There are at least four distinct causes operating in Graaff-Reinet all tending to produce a high infantile mortality among Natives:

First.—The very high proportion of illegitimate births.

Second.—The fact that a considerable number of the mothers go out to work during the day and leave their children uncared for.

Third.—The almost universal ignorance that prevails among the Native population as to the proper methods of rearing children.

Fourth.—The insanitary condition of the location, combined with the want of a proper water-supply.

Table showing the number of deaths in Graaff-Reinet during 1905 :—

	Bronchitis & Pneumonia.		Enteritis and Diarrhoea.		Phthisis.		All other Diseases.		Total Deaths from all causes.	
	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.
January ...	1	2	...	3	...	6	5	7	6	18
February ...	...	2	...	3	...	...	...	7	...	12
March ...	...	...	...	1	1	4	3	5	4	10
April ...	...	8	...	3	1	1	2	6	3	18
May ...	...	5	...	4	1	2	3	7	4	18
June ...	...	6	...	1	1	4	1	7	2	18
July ...	...	7	...	2	...	1	3	9	3	19
August ...	1	13	...	1	...	1	4	6	5	21
September	1	5	...	1	...	5	3	2	4	13
October ...	3	14	...	3	1	5	6	8	10	30
November	...	11	...	5	1	3	5	11	6	30
December	1	10	...	13	2	5	2	9	5	37
Total ...	7	83	...	40	8	37	37	84	52	244

Mortality per thousand per annum :—

Europeans, 13 (calculated on population of 4,000).

Coloured, 40·6 (" " " " " 6,000).

(ii) ADENDORP (MUNICIPALITY).

(1). The source of the water-supply is from a spring in the bed of the Sunday River, below the town of Graaff-Reinet, which appears and disappears at intervals in the bed of the river, and is under the control of the Graaff-Reinet Authorities and without the area of this Local Authority. The water, after leaving the river, is conveyed in an open furrow. The supply is inadequate and liable to pollution by the washing of clothing therein allowed by the Municipality of Graaff-Reinet.

- (2). Nil. The Sanitary Inspector attends to the removals.
 (3). No infectious diseases have occurred nor is there any Hospital accommodation.
 (4) and (5). Nil.
 (6). The Sanitary Inspector has reduced the overcrowding among Coloured persons by warning them of the penalties of the Law, and inspecting all dwellings occupied by Natives. He also superintends to the cleaning and disinfecting of all such dwellings and premises.

(iii) NEW BETHESDA (MUNICIPALITY).

- (1). The water-supply is good and is distributed in open furrows. Possibility of contamination does exist, but no injurious effects have been traced to that source.
 (2). (a) Night-soil is disposed of in cess-pools. (b) Slop-water is also emptied into the cess-pools. (c) Household and other refuse are deposited on a spot set aside for the purpose.
 (3). Infectious Diseases.—During this period there have been notified cases of
 Typhoid 7 (2 fatal)
 Diphtheria 19 (1 fatal)
 Erysipelas 1
 There is no Infectious Diseases Hospital. All cases are properly isolated at their homes.
 (4). No public abattoirs have been established. Care is taken that slaughtering of stock creates no nuisance or danger to public health.
 (5). No system of meat inspection is carried out.
 (6). Overcrowding is duly guarded against.
 (7). Hardly any rats are found in this Local Authority.

GRIQUALAND EAST.

(i) KOKSTAD (MUNICIPALITY).

*Report of DR. A. THORNTON, Medical Officer of Health.

- (1). There is no change to report in the water-supply. The supply is still conveyed to and distributed through the town in open furrows; the source is from springs in Mount Currie, at the north end of the commonage, and is, therefore, situated within the area of Municipal control. The water is pure at source, and adequate in quantity, but is open to pollution from source to distribution.
 (2). (a) The dry-pail system is used, and a night-soil removal cart is maintained by the Municipal Council. So far as it goes the system is most satisfactory, but it should be compulsory upon all householders to make use of the facilities.
 (b) Slop-water is dealt with privately, usually it is deposited in holes dug on the erven, and covered over with earth when full.
 (c) Household and other refuse are dealt with as in (b). Dry solid refuse is removed to sites upon the commonage set apart for this purpose.
 (3). Infectious diseases have not prevailed to any great extent, with the exception of Enteric Fever, of which thirteen cases were notified from January to May, 1905. Of Diphtheria only two cases were reported, both recovering under use of antitoxin. No infectious diseases Hospital has yet been provided, but most cases of Enteric Fever are removed to the East Griqualand and Usher Memorial Hospital for treatment.
 (4). No public abattoirs have been established, nor is there any intention of doing so at present. The three local butchers have each their own slaughter-houses at a site on the commonage appointed by the Local Authority, and it is one of the duties of the Sanitary Inspector to see that these premises are kept in a sanitary state; so far there have been no complaints.
 (5). Meat inspection is also carried out by the Sanitary Inspector, who would report to me if necessary. So far no prosecutions in connection with sales of diseased or unsound meat have been necessary.
 (6). The Sanitary Inspector deals with such matters, referring to me when necessary.

* Forwarded by Municipality for publication.

(7). Rats are not unusually prevalent, and no special steps have been taken for their extermination.

(8). Births during 1905: European, 25; Coloured, 68.

Deaths during 1905: European, 11; Coloured, 46.

Death-rate per thousand: European, 13.11; Coloured, 22.27.

Deaths of infants under one year: European, 5, or 20 per cent.; Coloured, 17, or 28.26 per cent.

(ii) MATATIELE (MUNICIPALITY).

(1). The water-supply of the village of Matatiele is obtained from several sources:—

(a) The village pump: The water obtained from the bore is used for household and irrigation purposes, but the general opinion seems to be that it is unsuited for the latter, owing to the large amount of salt contained in the water. The bore is 197 feet deep, and the water is good for domestic purposes, with little or no chance of pollution, and is generally mostly used.

(b) Springs: When the village pump goes out of repair, the inhabitants have to resort to the use of spring water. Indications of springs are many, but only one or two actually break and give water, being on the average very weak. These are on the north-west and south-east sides of the village. The water obtained from these springs is said to be better for all purposes than that of the water from the pump in the square, and people living near these springs prefer to obtain their requirements from this source, rather than carry water so far from the village pump, which is not so centrally situated. The main supply for the Native Location is obtained from a spring by pipes giving three thousand gallons per diem.

(c) Rainwater: Several of the residents have specially constructed underground tanks, varying in capacity, which catch the rainwater, and so store it till required. These tanks vary in construction, are very useful in times of drought, but may be contaminated unknowingly.

Rainwater is much used in the village for domestic and other purposes, most houses having rainwater tanks connected with the roof gutters. There is no purification of this rainwater, and it is usually used indiscriminately without being boiled or treated.

Many private individuals have their own bore-hole and pump in their own erf, sunk various depths.

The Municipal Council have assumed control of the pump in the Market Square, but as yet no bye-laws have been framed for the good conduct of same. These will be framed at an early date.

The total amount of water derived from all these sources combined is totally insufficient and unsatisfactory for the daily increase and growth of the town. Hence the urgent necessity of obtaining an efficient and satisfactory water-supply, such as is now projected at the present time. There are no natural surface dams in the vicinity, but these could easily be constructed owing to the suitability of the adjoining ground.

(2). No Public Health Bill is in force in the village, hence the Municipal Authorities are absolutely at a standstill as regards the disposal of night-soil, slop-water, household and other refuse.

The sanitary arrangements of Matatiele are administered by the Municipality. There are no Sanitary Inspectors or Officers of any kind on this service, in fact the sanitary question is merely in its infancy. But generally speaking, the arrangements and conditions are much the same as towns of the same size in South Africa.

Conservancy arrangements.—The Municipality have initiated a scheme on the dual pail system, by which those who voluntarily subscribe to its upkeep, have the benefit of having night-soil removed weekly at a cost of five shillings per month. Only a few avail themselves of this opportunity.

The usual method of disposal is for each householder to bury the contents of his privy pails into a pit dug for the purpose in his erf or garden, and likewise with the slop and refuse and other rubbish. Those who avail themselves of the sanitary contract have the pails emptied weekly, bi-weekly, or oftener, according to the individual wishes of the subscribers, and the whole is collected and carted away to pits dug specially for the purpose, a good distance from the village.

The pails are kept clean and disinfected. Those living in the Locations have no system in particular, the crude earth closet, a pit dug in the ground, and covered up when full, or depositing in neighbouring dongas, being the only "system."

(3). There have been no infectious diseases of late, and no provision is made for Hospitals in case of an outbreak. No Municipal organisation exists for effectually dealing with the spread of infectious diseases, and there is no means of isolation.

(4). Private slaughter-houses exist, but are under the control of the Municipality. They are some distance, on the north side, away from the town, and are merely kraals fenced in with stone, without any water-supply, and no arrangements for the disposal of blood or offal, except in the neighbouring dongas and pits dug in the soil.

(5). There is no system of meat inspection carried out.

(6). The Municipal Authorities have enforced their bye-laws, so that no filth, rubbish, etc., can accumulate in the public places. Overcrowding of dwellings does not exist.

(7). The number of rats in the village is decidedly small, in fact it may be said that there are none.

(8). Houses are built of sandstone and brick, and in most cases cemented over. Many of the houses now inhabited are merely built of mud on sun dried bricks, hence at certain seasons of the year are next to uninhabitable owing to being infested with vermin.

There are no public laundries. Washing is carried out in private dwellings by the Natives, or in the spruits when water is available.

Latrines are on the pail system, and the pails stand in the surface soil. There is no prepared base or other means of preventing the pollution of the ground.

When the Public Health Bill has been proclaimed then these difficulties will be largely got over, and the general sanitary state of the town would be greatly improved.

(iii) ELLIOT (VILLAGE MANAGEMENT BOARD)

A full statement regarding the matters referred to in the circular letter is contained in the last annual report, and no important alterations have since occurred.

HANOVER.

HANOVER (MUNICIPALITY).

(1) The water-supply is obtained from natural springs situate about a thousand yards from the town, which are under the control of the Municipal Council, and situate within the area of the authority of the Council. The springs are covered in by a substantial building, and the water is brought to the immediate outskirts of the town in twelve inch steel pipes, from whence it is distributed through the town in pipes of six, four, and two inch diameter, with twenty stand-pipes having cocks attached. The overflow water is run through the town in open furrows for irrigating gardens. The supply during normal seasons is adequate for all purposes, but owing to the existing drought the supply has decreased considerably. There is, however, no fear that the springs will give out *in toto*. As the water is in pipes now, the supply is pure, and cannot be polluted. A loan of £2,000 was raised from the Colonial Government, payable in ten years, to carry out this pipe scheme, which was completed in the early part of 1905.

(2). (a) Night-soil is collected once a week from every house by a contractor in properly covered buckets, and deposited in pits about a mile and a half from the town.

(b) Slop-water is carted away by the householders themselves, under supervision of the Sanitary Inspector.

(c) Household and other refuse are collected by a contractor once a week from every house, and deposited outside the town on a spot specially set apart by the Council for the purpose.

(3). Infectious diseases have been on the decrease considerably since the pipes for the water have been laid. Some isolated cases of Enteric Fever have been reported, which did not require any assistance from the Council. No infectious diseases Hospital accommodation has been provided.

(4). Slaughtering is carried out beyond the limits of the town, at a place specially set apart for the purpose. The condition of this place is under the supervision of the Sanitary Inspector.

(5). There is no system of meat inspection. The butcher shops are kept very clean and well ventilated.

(6). The Sanitary Inspector and Storekeeper report any contravention of the regulations dealing with the subject matters of this paragraph, and the defaulters are immediately made to answer for their defaults.

(7). There are no rats in this division.

HAY.

GRIQUATOWN (VILLAGE MANAGEMENT BOARD).

No report furnished.

HERBERT.

DOUGLAS (MUNICIPALITY).

There is nothing further to add to the last report.

There have been no epidemic complaints or sickness of any sort, and the Sanitary condition of the town is satisfactory in every way.

HOPE TOWN.

(i) HOPE TOWN (MUNICIPALITY).

(1). The water-supply is very good, and is taken in pipes from source of origin to a dam. What is used for drinking purposes is caught as it comes from the pipes, the remainder that runs into the dam is used for irrigating the gardens.

(2). The night-soil is carried away twice weekly by the bucket system, and answers very well.

(3). The Government Contagious Diseases Hospital is small and badly built. As there has been no case of contagious disease the old Hospital is now used by the Council for storage of sanitary buckets.

(4). The management of the slaughter-houses, which is situated on the outskirts of the village, is very good.

(6). Overcrowding and dwellings unfit for habitation have not been noticed.

(7). Rats do not give any trouble.

(8). The cemeteries and burial ground are well kept. The Local Authority does not employ a Medical Officer of Health.

(ii) STRYDENBURG (VILLAGE MANAGEMENT BOARD).

(1). The water-supply has still further diminished since the last report was furnished, amounting almost to water famine; private undertakings to increase the supply have proved of no avail, and recourses to that end are exhausted.

(2). The collection and disposal of night-soil, household, and other refuse are carried on by contract.

(3). No infectious disease has prevailed.

(4). Slaughtering is carried on outside the village at a spot marked off by the Local Authority, no building for the purpose is in use, nor contemplated.

(5). No meat inspection is in vogue.

(6). Any sanitary defects that may have been found to exist have been duly looked after.

(7). No rats are prevalent.

(8). Nothing further to report as regards health and sanitation, which are generally satisfactory.

HUMANSDORP.

(i) HUMANSDORP (MUNICIPALITY).

No report furnished.

(ii) HANKEY (MUNICIPALITY).

(1). The water-supply is derived from a dam across the Klein River, belonging to, and within the boundary of, the Municipality, and is conveyed in an open furrow over the Commonage and through the village to the lands. During severe droughts the supply becomes very limited and with a brackish taste. The Klein River, until it leaves the town, runs nearly parallel with the furrow, but at a lower level, and during severe droughts the water becomes very scarce and brack.

(2) and (3). Nil.

(4). Slaughtering is carried out on private property in town.

(5), (6), (7), and (8). Nil.

JANSENVILLE.

JANSENVILLE (MUNICIPALITY).

*Report of Dr. P. J. HENDERSON, Acting Medical Officer of Health.

The general health of the community has been good, more rain has fallen than in the last few years.

An outbreak of Glanders occurred amongst the horses of one or two persons, but the Government Veterinary Surgeon took such measures that nothing further has come of the disease.

Owing to the activity of our new Town Council, we have at last possessed ourselves of a new Town Hall, a very good building in most ways, and well ventilated.

(1). The water-supply is from bore-holes and tanks, some persons, especially Natives, using the river water either as it stands in pools or from holes scooped out in the sand of the river bed.

The water-supply proper, *i.e.*, water stored in tank by the Dutch Reformed Church, and driven there from well near river bed by windmill, is under control of Local Authority and within the area of that Authority. From the tank above-mentioned water is carried, when the windmill is working and the wind is favourable, down the main street in pipes, and water can be obtained from taps placed in the street at certain intervals.

Most people have been able formerly to get enough drinking water from their rain tanks, but the supply for other purposes has been most inadequate, and it seems as if nothing could be done towards a better supply, owing to want of funds.

The Council we have at present leave nothing to be desired as regards forging ahead, and in spite of an obstacle, we are now face to face with a water scheme in the shape of an oil engine and new bore-hole, beside the old tank at the Dutch Reformed Church, the idea being to pump water from there up to a cistern, which will give fall enough to supply the town in general.

Messrs. Alexander and Co., who were employed by the Council to bore for them, made an unsuccessful attempt to get water above the dorp and in a line with the Native English Church.

The supply as at present estimated from the two bore-holes ought to be enough to supply the whole village, and I believe the idea is, that should the new bore-hole prove not as good as it looks now, to shift the engine from there to the well by the river.

The water-supply is not liable to pollution, and, though brackish, is pure.

Pigeons are again on the increase in the dorp, which is a source of danger, if they are of the sort that sit on house-tops or are allowed too much liberty. I do not wish to discourage by these remarks the keeping or flying of carrier pigeons, which, if properly exercised, can do no more harm than ordinary birds, or even less than many.

The Town Council, a year or two ago, took measures to stop this nuisance, but time has evidently made us careless again in this respect.

(2). (a) The pail system is carried out by a contractor and works very well indeed. Special pails are provided in cases of infectious disease. The removal of one pail per week costs 2s. 6d. per month. The Council here have decided to keep in stock "Cyllin," a new concentrated disinfectant of the coal tar order, and inhabitants will be able to procure, at cost price, either the liquid "Cyllin" or "Cyllin" powder. This is a new departure for our Town Council and one that ought to be supported and taken advantage of by the inhabitants generally.

(b) None existing.

(c) Refuse is deposited below Messrs. Joeph and Co.'s store, amongst the trees alongside the river, which is spoiling a site that is now used as a walk, and might at some time become a fashionable promenade. Several persons, I believe the Magistrate among them, have brought this before my notice, and I think it is time the Council saw to it.

(3). There have been a few cases of Diphtheria, Enteric Fever, and Measles about, but nothing of note. The Measles came from Uitenhage, and was marked mostly for the Bronchial trouble associated with it.

The frame-work of the old Small-pox Hospital is still in situ.

(4). The Council can at present do nothing further in this respect as more important things claim their attention; the idea of a public slaughter-house has been considered carefully, and when means will allow of the expenditure it will come along.

At present butchers slaughter at sites allotted to them by the Council; they are supervised by the Council, and work quite well.

(5). The Sanitary Inspector, a thorough and capable man generally, has charge of this, and has before now brought suspicious samples of meat to me to look at. I have seen samples of condensed milk, not what they ought to be, and have heard of some very injurious lime juice.

(6). Buildings are put up here that, in my opinion, are not healthy, but I do not think the Council have power to prevent this.

(7). I have never seen a rat since I came here in 1902, and I have never heard of there being any dead or alive about.

(8). The site for disposal of sewage is, in my opinion, dangerous, being so near the river; the difficulty here is to get a site with any depth of soil.

KENHARDT.

KENHARDT (VILLAGE MANAGEMENT BOARD).

No report furnished.

KIMBERLEY.

(i) KIMBERLEY (BOARD OF HEALTH).

Report of Dr. A. W. REID, Medical Officer of Health, for the year 1905.

Population.—The Census figures taken in 1904 are as follows:—

		WHITES.		COLOURED.		ALL RACES.
		Males.	Females.	Males.	Females.	
Kimberley	...	8,034	6,267	15,045	5,984	35,330
Beaconsfield	...	1,641	1,370	7,555	2,831	13,397
District	...	2,143	1,830	3,242	4,057	11,272
Totals	...	11,818	9,467	25,842	12,872	59,999

The estimated population for the year and its distribution is shown in Table I. The Census figures for Kimberley and District has not been altered as there have been no such marked increase as in the case of Beaconsfield. Here the additional number of Natives employees working in the Wesselton, Bultfontein, and Dutoitspan Mines have been added to the Census figures for that area. Any increase in the population outside the compounds can not be reliably estimated. It is desirable to point out that the preponderance of males over females is largely due to the fact that this is mainly a mining community, and the Native employees live in compounds and migrate at intervals to and from their own Districts where their families reside.

Births.—The number of births registered during the year was 647 Whites and 649 Coloured, a total of 1,296 as compared with 590 Whites and 549 Coloured, total 1,139 for last year. The rate per 1,000 is thus 37·3 for Whites, and 17·6 for Coloured, or excluding Natives in compounds 33·4. The birth-rate of England and Wales (1904) was 27·9 per 1,000 inhabitants.

Table No. XVIIA. shows the number of births registered in each month. It will be noticed from Table No. XVIIc. that nearly half the Coloured births registered were returned as illegitimate. Amongst Whites 10 were returned as illegitimate against 5 in the previous year.

Deaths.—The total number of deaths registered in Kimberley and Beaconsfield during the year was 1,584. In Kimberley the deaths of 214 Europeans were recorded against 224 in the previous year. In Beaconsfield 33 as compared with 40 in 1904. The death-rate among Europeans is equal to 14·2 per 1,000 as com-

pared with 15·2 last year. The death-rate of England and Wales (1904) was 16·2 per 1,000 inhabitants. Amongst the Coloured population in Kimberley 840 died as compared with 682 in 1904. In Beaconsfield 497 against 362.

Deaths from Zymotic Disease.—As will be seen from Table No. XXI. thirty-eight deaths occurred from notifiable Zymoties in the year, which is equal to a death-rate of ·7 per 1,000 population.

The following non-notifiable Zymoties were responsible for 55 deaths, Measles causing 53, and Whooping Cough 2.

Deaths under One Year.—The deaths of children under one year of age number 340, which is equivalent to a rate of 262·3 per 1,000 births. Last year the infantile death-rate was 294·1 per 1,000 born. This shows a slight improvement, but is still very unsatisfactory. It means that at least 26 infants have died for every hundred born.

The following Table shows the chief causes of death among children under one year of age:—

				White.	Coloured.	Total.
Diarrhoeal Diseases	...	...		29	75	104
Respiratory Diseases	...	...		5	71	76
Tubercular Diseases	...	...		1	5	6
Developmental Diseases	...	...		18	26	44
Convulsions	...	...		5	16	21
Premature Birth	...	...		8	30	38
Meningitis	...	...		6	4	10
Measles	...	...		...	14	14
All other causes	...	...		9	18	27
Total	...	...		81	259	340

Many of these diseases are more or less avoidable, especially Diarrhoeal Diseases, which, as will be seen, were the cause of the larger proportion of deaths. The chief cause of this preventable waste of human life is in the opinion of all authorities due to germs getting access to food, and especially to milk. No doubt they are assisted by unsuitable food, irregular feeding, uncleanly feeding bottles and tubes and insanitary surroundings, aggravated by a high atmospheric temperature. Many Local Authorities, recognising the importance of a pure milk supply for infants, have established Corporation milk sterilising depôts for this purpose. Some also appoint Lady Inspectors, who are often helped by voluntary assistants, to visit those responsible for the rearing of infants, and give them instruction in home hygiene. Reports on the results show that these precautionary measures are having a notable effect in reducing the infantile mortality in the towns concerned.

Deaths of Aged People.—The number of deaths registered of people aged 65 years and over was 58, or 3·66 per cent. of total deaths.

In the following list will be found groups of diseases, deaths from which form the greater part of the total of 1,584 deaths.

				KIMBERLEY.		BEACONSFIELD.	
				White.	Coloured.	White.	Coloured.
Respiratory Diseases	...	...		20	265	6	243
Tubercular	...	...		26	173	2	61
Zymotic	...	...		49	145	17	72
Nervous	...	...		20	23	...	2
Circulatory	...	...		22	52	...	14
Developmental & Degenerative Diseases	...	...		20	61	5	16
Syphilis	...	...		1	12	...	7
Scurvy	...	...		...	10	...	6

It will be seen that by far the larger proportion of the total deaths were due to diseases of the respiratory tract. The number of cases of Pneumonia terminating fatally, especially among Coloured people, is very striking, and demands attention. It is generally conceded that resisting power against this disease is much lower in their case than amongst Whites. The figures for this year, as in previous years, show that this disease is one of the most prevalent and fatal amongst Natives.

Properly speaking, Pneumonia consists of a group of diseases, and there is no doubt that some of its forms are infectious. I am of opinion that one of its main exciting causes is the reckless way in which many expose themselves to chills. The majority of people appear to disregard the sudden changes of temperature to which the climate is prone both Summer and Winter. More attention to changing and suiting the amount of clothing to the temperature, and wearing wool next the skin at all seasons of the year, would guard against a lowering of the resistance of the tissues of the lung by chill, which prepares the tissues for an attack of the disease. Unfortunately in the case of the Native he does not appear to understand or take the least care or trouble to avoid any condition which is likely to injure his health.

Amongst the deaths due to Tubercular Disease, the form affecting the lungs, commonly known as Consumption, accounted for no less than 245 deaths as against 155 in the previous year and 134 in 1903. These figures show that the disease is rapidly on the increase. This is especially the case amongst the Coloured population, who live under conditions highly favourable to its spread, and who are indifferent to personal precautionary measures against infection. The disease is due to a specific germ known as the Tubercular Bacillus, which, on account of having fat in its composition, lives for a long time in a dried condition. Hundreds of thousands are present in the phlegm coughed up by one suffering from Phthisis. Wherever the patient may happen to be, he expectorates, in the house or anywhere outside. The bacilli dry up with the phlegm and are carried about in the dust infecting any susceptible person who may inhale them into their throat or lungs. Disinfection or cremation of phthysical sputum is the most important precautionary measure, particularly in this dry climate, for checking the spread of the disease. This, I believe, is understood by the majority of the White population, though too often neglected in carrying it out. Anyone acquainted with the Native will recognise the enormous amount of education necessary before he can or will understand it. In their case much can be done by careful instruction during their school days. As the disease runs a long and lingering course, the expense of isolating the hundreds affected would be very great. Under the circumstances measures for the prohibition of expectoration in public places would considerably tend to decrease the danger. Also better window ventilation and less overcrowding in Kafir huts should be insisted on. The huts should be provided with something more impervious for floors than mud.

Diarrhœal Diseases account for by far the largest number of deaths due to Zymotics; the figures are 190 against 182 last year. Of these 148 occurred amongst children under 5 years of age as compared with 159 in the previous year, showing in this case a decrease of 11 deaths. I am inclined to attribute this to a less adulterated milk supply. The amount of chemical preservatives added to milk during the early Summer months, until the Board drew attention to the fact, was simply appalling.

It will be noticed from Table No. V. that 49 deaths were uncertified. That is, 49 burials took place without any knowledge as to the causes of death. The dangers of this proceeding are self evident.

Notifiable Infectious Diseases.—During the year 654 cases of infectious diseases were notified to the Board. Their nature, monthly distribution, mortality, number removed to Temporary Isolation Hospital, and the disinfections done, are shown in Tables XX., XXI., XXII. and XXIII.

Enteric Fever.—Sixty-four cases were notified during the year as compared with 113 last year and 89 in 1903. As pointed out in my various monthly reports, the source of infection in this disease is most frequently directly or indirectly due to contaminated drinking water, taken from shallow wells open to surface drainage, or from stagnant water holes. Water from a like source may be used for washing milk bottles, or may even be added to the milk. Dust and flies may act as contaminating agents in some cases, infecting milk, food or water-bags, so often used as coolers. Enquiries made about the origin of cases usually elicit one or other of the above as the most likely source. Every possible opportunity has been taken to warn the public to protect themselves against these dangers. The majority of cases were treated in Hospital. When nursed at home, printed

directions for preventing the spread of the disease to others were sent to the householder.

Scarlet Fever.—A considerable outbreak of this disease in a very mild form occurred, chiefly in the latter month of the year. One hundred and seventy cases were notified, but I do not think that this number by any means represents the total. Many were so mild as to escape notice until others in the same family developed it. Probably some were entirely overlooked, and not having any medical attendance were not reported. Others were found attending school during the desquamating stage. Two deaths occurred due to throat complications.

Diphtheria.—Twenty-four cases were notified this year as compared with 17 last year. All the cases occurred in Kimberley. In September, 3 cases occurred in one family. Infection has in a few instances been traced from one case to another. The following reasons may account for isolated cases and difficulty in tracing their source. The infecting agent can withstand drying for many weeks, or can live as saprophytes in a patient's throat for weeks or months after recovery. It is also probable that it may be communicated from diseases of a similar nature in the lower animals, fowls, cats, etc.

Erysipelas.—During the year 36 notifications of Erysipelas were received as compared with 87 last year, and 3 deaths were certified as due to this cause. In 1904, 6 deaths were returned as due to this disease.

Puerperal Fever.—Four cases were notified against 7 in the previous year. Three occurred in Kimberley and one in the District. The same midwife attended two of the cases in town about the same time. She was immediately prohibited attending any further cases until permission was granted. Infection was communicated to the third case from one of the former two.

Leprosy.—Three cases of this disease were notified as compared with 8 in 1904. They were all removed to Robben Island. The extraordinary length of time, extending into months, which passes between the notification and removal to Cape Town of Leprosy cases, appears very unreasonable. In the interest of the public, the patient and the patient's friends, a more expeditious procedure should be adopted for their transfer.

Small-pox.—A total of 252 cases occurred between May and October. The outbreak began in Green Point Location, near Beaconsfield, and, as a considerable number had contracted the disease before discovery, rather extensive arrangements had to be made at the Lazaretto for their accommodation; feeding and attendance, as well as for their transport over a considerable distance. The staff was increased as soon as possible to meet the emergency. The first batch of 21 patients and 12 contacts was removed on the 10th May; by the end of the month 81 patients and 126 contacts had been admitted to the Lazaretto. The contacts were chiefly the mothers of young children suffering from the disease, or young children accompanying their mothers. Other 9 cases, which occurred later in the month among Europeans, were isolated and treated at their homes. Table No. XXIIb. shows the monthly incidence of the disease. The origin or source of the outbreak has not been satisfactorily traced. It would appear that three cases occurred in April, one of them being a Native preacher, who had a large number of visitors, and came in contact with many people. Very few of the inhabitants, especially the younger generation, were protected by vaccination, consequently the disease spread rapidly. The first cases notified among Europeans were in Takoon Square, on the 15th May, 1905, and Elsmere Road, on the 20th May, 1905, which are at some distance from the location. Infection was probably carried by Native servants who worked in the town during the day and returned to the location at night. Later on again, the families of some Indians, who sell vegetables and fruit about the streets, contracted the disease but concealed the cases. Some Coloured people were guilty of the same offence. Two householders were prosecuted and convicted, a small fine being imposed. Infection in a considerable number of instances was traced to these concealed cases. None of the cases showed any hæmorrhagia or purpuric tendency, and with the exception of 10, which were more or less confluent, they were all discrete. The first case from the District was reported from Wedberg Kopje, on the 2nd of August, and, on investigation, three Natives suffering from the disease, and other three who had completely recovered, were discovered. Those still infectious were isolated in a camp there, the Estate Manager kindly lending an empty dynamite magazine for the purpose. Two Native guards were employed, but later it was found necessary to place a European in charge, who would carefully inspect the Native quarters. One Native guard was discharged. Four cases were discovered later and isolated in the camp. The European who contracted the disease came to Kimberley on first feeling ill, and was taken to the Lazaretto, the rash having appeared on the journey in.

The following shows total number and distribution of cases, May 10th to October 20th, 1905 :—

	WHITES.		COLOURED:	
	Males.	Females.	Males.	Females.
Kimberley	18	11	30	18
Beaconsfield	2	1	100	61
District	1	...	9	1
Total	21	12	139	80

The following Tables show age, incidence, vaccinated and unvaccinated :—

VACCINATED.

	Whites.		Coloured.		Total.
	Males.	Females.	Males.	Females.	
Under 6 months ...	...	...	...	...	...
6 months to one year ...	...	...	...	...	...
1 year to 5 years ...	1	2	4	2	9
5 years „ 10 „ ...	1	1	2	...	4
10 „ „ 20 „ ...	...	...	7	...	7
20 „ „ 30 „ ...	2	1	36	5	44
30 „ „ 40 „ ...	2	...	11	9	22
40 „ „ 50 „ ...	4	...	3	...	7
50 „ „ 60 „ ...	1	...	3	...	4
60 „ „ 70 „ ...	...	...	...	1	1
70 „ and upwards ...	...	...	...	...	...
Total	11	4	66	17	98

UNVACCINATED.

Under 6 months ...	...	...	7	3	10
6 months to 1 year ...	1	...	2	3	6
1 year to 5 years ...	3	4	16	15	38
5 years „ 10 „ ...	3	2	10	10	25
10 „ „ 20 „ ...	2	...	10	10	22
20 „ „ 30 „ ...	...	...	11	6	17
30 „ „ 40 „ ...	1	2	10	7	20
40 „ „ 50 „ ...	...	...	5	4	9
50 „ „ 60 „ ...	...	...	2	2	4
60 „ „ 70 „ ...	...	...	...	1	1
70 „ and upwards ...	...	...	...	2	2
Total	10	8	73	63	154

Cases vaccinated within a period of three weeks of first appearance of rash are entered in the above lists as unvaccinated.

The number of cases vaccinated and unvaccinated are shown in the following Table:—

				Whites.		Coloured.		Total.
				Males.	Females.	Males.	Females.	
Vaccinated	...	...	...	11	4	66	17	98
Unvaccinated	...	...	...	10	8	73	63	154
Total	...	...	...	21	12	139	80	252

The total number of deaths, vaccinated and unvaccinated, are as follows:—

						Whites.		Coloured.	
						Males.	Females.	Males.	Females.
Vaccinated	1	...
Unvaccinated	5
Total	1	5

Another death was, after *post-mortem* examination, returned as due to Syphilis and Small-pox, but no particulars as to vaccination, etc., are available. It was only reported in the usual manner by the Registrar of Births and Deaths after burial.

Two of the females who died were over 70 years of age. The male had been convalescent for some time, when he died suddenly from Organic Heart Disease, Dropsy and Ascites. He had been tapped for the latter on three or four occasions before contracting Small-pox.

The extra staff employed, as occasion arose, consisted of 3 female attendants and 2 male guards at the Lazaretto; 3 European and 3 Native inspectors and guards in the locations and town.

The total number treated or isolated at the Lazaretto was as follows:—Seven European patients and one contact; 207 Coloured patients and 87 contacts. The total expenditure incurred through the outbreak was as follows:—May, £237 18s. 3d.; June, £211 18s. 4d.; July, £176 13s. 3d.; August, £187 9s. 9d.; September, £208 6s. 8d.; October, £104 4s. 2d.; November, £39 10s. 5d.; total, £1,166 0s. 10d.

Vaccination.—The Officers of the Board carried on vaccination as far as possible among probable contacts, visiting from house to house in all infected areas as soon as cases were notified or discovered. In many families both parents and children were found to be unprotected. A total of 5,623 operations were performed in this manner, or at the Office of the Board of Health. The District Surgeon vaccinated 12,546 persons, which number includes operations performed at 12 centres in the town appointed by Government.

The Officers of the De Beers Company vaccinated about 18,000 Native employees in the compounds.

Private practitioners vaccinated about 3,000, making a total of 39,169 vaccinations or re-vaccinations in the Division of Kimberley during the year.

Milk-supply.—Early in the year the Board drew attention to the primitive and unsatisfactory methods by which the town milk-supply was delivered and collected, and the necessity for enforcing regulations for its proper control and protection from contamination. The use of an easily cleaned vessel for the distribution of the milk, corked in a way which would protect its contents from pollution, was strongly urged, and discussed with the leading milk vendors at a special meeting convened for the purpose. Again, on the advent of the hot weather, it was found necessary to make strong representations as to the necessity for immediate steps being taken under the Food and Drugs Adulteration Act, to put a stop to the dangerous method of preserving milk by the addition of powerful chemicals.

It was shown that such a milk-supply, open to all kinds of contamination, was a source of grave danger to the public health, and deprived many infants and invalids of a very necessary diet. It is satisfactory to note that the action of the Board has resulted in the adoption of Standard Regulations for its control.

The advantages of sterilizing the milk by heat were frequently impressed on the public. There is no doubt that the careful carrying out of all these measures is bound to result in great benefit to the health of the public, affecting strong adults as well as the young and delicate.

Water-supply.—The main source of the water-supply of this District is the Vaal River. It supplies the greater proportion of the water used in Kimberley, Beaconsfield, and Warrenton, but a considerable amount is also obtained from wells. There are 257 wells within the Borough of Kimberley alone. These wells are of various depths, generally about 40 feet. Many are unsatisfactory on account of liability to contamination through surface drainage and insanitary surroundings.

The Kimberley Water Works Co. supply by far the greater portion of both the Municipalities. At the intake on the Vaal River it is passed through sedimentation tanks, and, after being pumped about seventeen miles, is passed through sand filters at the town reservoirs from which it is distributed. As far as periodic chemical analysis goes, it shows the water to have been of good quality for the greater part of the year, but towards the close of the dry weather, when the river ceased to flow, there was an increase in the amount of albuminoid ammonia due to vegetable contamination, and after the first flood rains a slight increase in the chlorides and a considerable increase in the total solids, due principally to a very fine silicates in suspension. When the water is in this condition, boiling or reliable filtering is a necessity.

The question of a diminished supply, through many of the river tributaries being diverted for irrigation purposes, has been engaging the attention of the Company.

Temporary Infectious Disease Hospital.—The small building near Ottos Kopje, rented by the Board for the purpose of isolating cases of infectious disease, has been found extremely useful. Twenty-one cases were isolated and treated during the year, six of these were Europeans suffering from Scarlet Fever, and one European and fourteen Natives from Erysipelas.

The erection of a permanent building for this purpose, having accommodation for patients willing to pay, is a grave want in a town like Kimberley. The rent paid for the present building and income derived from paying patients, Enteric Fever included, would go a long way towards its upkeep. The immediate isolation of first cases of infectious diseases is of the greatest importance in preventing their spread. With a building specially provided for the purpose, patients or guardians would have no excuse for objecting to removal. Such a building would greatly lessen the number of cases of infectious disease in the town, and while there were few, only a small extra staff would be required.

Sewerage.—I should like to take this opportunity of urging the early consideration of a sewerage scheme for the town. This, I think, is one of the most needed improvements required by the Borough. It would remove many disagreeable conditions affecting the comfort and convenience of the people, as well as have a far reaching effect in improving their general health.

TABLE I.—Estimated Population.

KIMBERLEY.

Including Kenilworth, Kamfersdam, and Otto's Kopje	14,301	
Coloured—		
In Mine Compounds, Locations, Convict Station, Gaol, Kamfersdam, Otto's Kopje, and the Borough	21,029	
		35,330

BEACONSFIELD.

Whites—		
Including Wesselton Mine and Village	3,011	
Coloured—		
In Mine Compounds, Locations, Gaol, Wesselton Mine and Village and the Municipality	15,800	
		18,811
Kimberley and Beaconsfield—All Races		54,141

TABLE II.—Total Deaths for 1905, Kimberley and Beaconsfield
(Classified according to Sex and Race).

		KIMBERLEY.				BEACONSFIELD.				Total.
		White.		Coloured.		White.		Coloured.		
		M.	F.	M.	F.	M.	F.	M.	F.	
January ...	...	9	8	53	24	1	1	22	4	122
February ...	...	9	5	54	14	...	...	28	6	116
March ...	...	13	4	62	12	...	...	24	7	122
April ...	...	9	7	49	18	1	2	20	16	122
May ...	...	15	14	53	17	1	1	29	7	137
June ...	...	14	8	42	17	1	...	25	8	115
July ...	...	14	5	42	18	3	2	27	9	120
August ...	...	10	7	38	16	1	...	29	10	111
September ...	...	14	7	42	16	1	1	33	7	121
October ...	...	7	3	54	33	1	...	47	12	157
November ...	...	8	3	42	33	5	3	56	12	162
December ...	...	14	7	61	30	6	2	41	18	179
Totals ...	...	136	78	592	248	21	12	381	116	1,584

TABLE III.—(A)—Deaths in Kimberley and Beaconsfield. Classified into Age Periods and Race.
KIMBERLEY.

	Under 3 months.		Under 6 months.		Under 1 Year.		1—5		5—10		10—20		20—35		35—45		45—65		65 Upwards.		Total.	
	W	C	W	C	W	C	W	C	W	C	W	C	W	C	W	C	W	C	W	C	W	C
January	2	9	2	2	1	2	...	9	...	1	...	5	26	5	2	13	2	7	3	17	77	
February	3	6	2	4	1	6	...	7	...	...	4	2	29	5	2	6	1	5	1	14	68
March	1	4	3	2	...	2	3	5	1	1	2	2	35	7	2	14	2	7	2	17	74	
April ...	1	2	1	3	3	7	1	4	...	1	5	4	24	11	3	7	3	11	3	16	67	
May ...	6	8	4	1	...	3	...	4	...	...	3	2	33	6	7	9	3	6	3	29	70
June ...	...	6	1	1	1	5	...	4	...	1	1	3	19	10	6	10	4	10	...	22	59
July ...	3	5	...	2	...	2	1	4	...	1	...	2	26	8	6	9	3	8	...	19	60	
August	1	5	1	2	...	3	2	3	...	...	...	3	17	8	2	5	4	8	3	17	54
September	2	4	2	...	1	5	2	5	...	1	2	2	24	7	1	8	1	7	2	21	58	
October	...	7	1	3	2	14	...	16	...	...	3	2	24	9	...	5	...	9	1	10	87
November	4	9	...	3	3	8	1	16	...	2	...	1	18	6	1	5	1	6	2	11	75	
December	6	10	3	4	3	15	2	19	...	3	1	1	22	10	2	5	2	10	1	21	91	
Totals	29	75	20	27	15	72	17	96	3	12	8	34	297	94	34	96	34	94	32	21	214	840

TABLE III.—(B)—BEACONSFIELD.

January	...	3	...	1	...	3	...	...	...	...	...	8	...	8	...	7	2	2	...	1	2	26
February	...	...	...	7	...	2	...	...	...	...	...	13	...	13	...	4	...	4	...	1	...	34
March	...	...	...	1	...	4	...	...	...	...	...	15	...	15	...	...	...	...	...	...	...	31
April ...	...	1	...	2	...	...	...	...	...	...	...	13	...	13	...	4	...	2	...	...	...	36
May ...	...	...	...	...	...	...	...	...	...	...	...	16	...	16	...	7	...	4	...	...	...	36
June ...	...	2	...	4	...	...	...	...	...	...	...	16	...	16	...	5	...	2	...	...	...	33
July ...	...	3	...	1	...	...	...	...	...	...	...	14	...	14	...	3	...	5	...	...	...	36
August	...	2	...	1	...	4	...	1	...	...	...	6	...	6	...	12	...	8	...	...	...	39
September	...	2	...	1	...	2	...	1	...	...	...	14	...	14	...	9	...	6	...	...	...	40
October	...	1	...	6	...	4	...	...	...	...	...	26	...	26	...	8	...	4	...	...	...	59
November	...	3	...	8	...	...	...	...	...	...	...	23	...	23	...	13	...	7	...	...	...	68
December	...	4	...	5	...	5	...	2	...	2	...	24	...	24	...	10	...	5	...	...	...	59
Totals	...	28	5	37	5	42	7	8	...	32	1	188	5	188	2	86	1	49	...	7	33	497

TABLE IV.—Deaths in Kimberley and Beaconsfield.

(Classified according to Sex and Race.)

			White.		Coloured.		All Races.	
			Males.	Females.	Males.	Females.	Males.	Females.
Kimberley	...	...	136	78	592	248	728	326
Beaconsfield	...	...	21	12	381	116	402	128
Totals...	...	...	157	90	973	364	1,130	454

TABLE V.—Deaths Classified, Certified, and Uncertified.

		Kimberley.		Beaconsfield.		Kimberley and Beaconsfield.	
		Certified	Uncertified	Certified	Uncertified	Certified	Uncertified
White Males	...	135	1	21	...	156	1
White Females	...	77	1	12	...	89	1
Coloured Males	...	585	7	368	13	953	20
Coloured Females	...	242	6	95	21	337	27
Totals	...	1,039	15	496	34	1,535	49

TABLE VI.—Deaths in Kimberley.

White Population.

Cause of Death.	All Ages.	Under 1 year.	1-5.	5-15.	15-25.	25-65.	65 Up- wards.
Measles	4	...	4	...	...	...	...
Scarlet Fever	1	...	1	...	...	...	...
Epidemic Influenza	1	...	...	...	...	1	...
Whooping Cough... ..	1	1	...	...	...	...	...
Diphtheria and Membranous Croup	2	...	1	1	...	...	...
Enteric Fever	6	...	...	1	2	3	...
Diarrhœa and Dysentery	22	15	3	1	...	2	1
Enteritis	8	5	3	...	...	...	...
Other Septic Diseases	4	1	...	1	...	2	...
Intermittent Fever and Malarial Cachexia	1	...	...	...	...	1	...
Tuberculosis of Lungs	24	...	...	1	1	22	...
Other Forms of Tuberculosis	1	...	1	...	...	...	...
Alcoholism	1	...	...	...	...	1	...
Cancer	9	...	...	...	...	3	6
Premature Birth	4	4	...	...	...	...	...
Developmental Diseases	16	16	...	...	...	...	...
Old Age	5	...	...	...	...	...	5
Meningitis	6	6	...	...	...	...	...
Inflammation and Softening of Brain	2	...	...	1	...	...	1
Organic Disease of Heart	13	1	...	...	2	5	5
Acute Bronchitis	2	2	...	...	...	...	...
Chronic Bronchitis	1	...	...	...	...	...	1
Lobar Pneumonia	14	...	...	...	2	12	...
Lobular Pneumonia	3	2	1	...	...	...	...
Diseases of Stomach	1	...	...	...	...	1	...
Obstruction of Intestines	3	1	1	...	...	...	1
Cirrhosis of Liver	3	...	...	...	...	2	1
Nephritis (Bright's Disease)	3	...	...	...	...	3	...
Tumours and other Affections of Female Genital Organs... ..	1	...	...	...	...	1	...
Deaths by Accident and Negli- gence	5	...	...	...	...	5	...
Deaths by Suicide	4	...	...	...	...	3	1
Deaths from Ill-defined Causes... ..	5	...	...	1	...	4	...
All other causes	38	10	2	1	3	13	9
Totals	214	64	17	8	10	84	31

Among the deaths under the heading of "All other causes" Convulsions accounted for 6, Apoplexy 6, Camp Fever 6.

TABLE VII.—Deaths in Beaconsfield.
White Population.

Cause of Death.	All Ages.	Under 1 year.	1-5.	5-15.	15-25.	25-65.	65 Up- wards.
Measles	2	...	2	...	...	...	...
Enteric Fever	2	...	...	...	1	1	...
Diarrhœa, Dysentery	3	2	1	...	...	...	...
Enteritis	9	7	2	...	...	...	...
Tuberculosis of Lungs	2	1	...	...	1	...	...
Premature Birth	4	4	...	...	...	...	...
Developmental Diseases	1	1	...	...	...	...	...
Lobar Pneumonia	5	...	2	...	...	3	...
Lobular Pneumonia	2	2	...	...	...	...	...
Nephritis and Bright's Disease...	1	...	...	...	...	1	...
Deaths by Accidents or Negli- gence	1	...	...	...	1	...	...
All other causes	1	...	...	...	...	1	...
Totals	33	17	7	...	3	6	...

TABLE VIII.—Deaths in Kimberley.

Coloured Population.

Cause of Death.	All Ages.	Under 1 year.	1-5.	5-15.	15-25.	25-65.	65 upwards.
Small-pox	4	1	...	1	...	1	1
Measles	40	12	26	2	...	...	...
Scarlet Fever	1	1	...	...	...	...	...
Epidemic Influenza	2	1	...	...	...	1	...
Whooping Cough	1	...	1	...	...	...	...
Enteric Fever	10	...	...	...	5	5	...
Diarrhœa, Dysentery	47	19	12	3	2	10	1
Enteritis	43	28	12	...	...	3	...
Erysipelas... ..	1	...	...	...	...	...	1
Puerperal Fever	2	...	...	...	..	2	...
Other Septic Diseases	5	...	...	...	2	3	...
Intermittent Fever and Malarial Cachexia	2	1	1	...	...	...	...
Tuberculosis of Meninges	2	2	...	...	...	...	...
Tuberculosis of Lungs	162	1	8	6	51	95	1
Other forms of Tuberculosis... ..	9	1	2	...	3	3	...
Alcoholism	1	...	...	...	...	1	...
Cancer	4	...	...	...	...	4	...
Premature Birth... ..	23	23	...	...	...	...	...
Developmental	23	19	4	...	...	...	...
Old Age	10	...	...	...	...	...	10
Meningitis	9	3	...	...	2	4	...
Inflammation and Softening of Brain	2	...	...	...	1	1	...
Organic Diseases of Heart	46	...	...	...	9	36	1
Acute Bronchitis	16	6	7	...	1	2	...
Lobar Pneumonia	194	...	1	1	41	150	1
Lobular Pneumonia	52	32	17	1	1	...	...
Diseases of Stomach	2	...	...	...	...	1	1
Obstruction of Intestines	5	1	...	...	...	4	...
Cirrhosis of Liver	1	...	...	...	...	1	...
Nephritis and Bright's Disease	10	...	...	1	1	8	...
Deaths by Accident or Negligence... ..	25	1	...	...	7	17	...
Deaths from ill-defined causes	11	...	...	1	1	8	1
All other causes	75	21	5	3	5	39	2
Totals	840	174	96	19	132	399	20

Among the deaths under the heading of "All other causes" Convulsions accounted for 19, Syphilis 12, Scurvy 10, Apoplexy 8.

TABLE IX.—Deaths in Beaconsfield.
Coloured Population.

Cause of Death.	All Ages.	Under 1 year.	1-5.	5-15.	15-25.	25-65.	65 up- wards.
Small-pox	3	1	...	...	...	1	1
Measles	7	2	5	...	...	...	...
Enteric Fever	4	...	...	...	3	1	...
Diarrhœa, Dysentery	31	7	6	...	3	15	...
Enteritis	27	21	5	...	...	1	...
Erysipelas... ..	2	1	...	...	...	1	...
Other Septic Diseases	1	...	...	...	1	...	...
Tuberculosis of Lungs	57	...	4	3	18	30	2
Other forms of Tuberculosis	4	1	...	1	1	1	...
Cancer	1	...	...	...	1	...	...
Premature Birth	7	7	...	...	...	...	...
Developmental Diseases	9	7	2	...	...	...	...
Old Age	1	...	...	...	...	1	...
Meningitis	8	1	2	...	...	5	...
Organic Diseases of Heart	9	...	...	...	1	6	2
Acute Bronchitis	17	10	6	...	...	1	...
Chronic Bronchitis	2	...	...	...	...	2	...
Lobar Pneumonia	190	...	...	4	42	144	...
Lobular Pneumonia	32	22	9	...	1	...	...
Obstruction of intestines	1	...	...	...	...	1	...
Accidents and Diseases of Parturition	1	...	...	...	...	1	...
Deaths by Accident or Negli- gence	47	...	1	...	14	31	1
All other causes	36	6	1	3	7	18	1
Totals	497	85	42	11	92	260	7

Among the deaths under the heading of “All other causes” Syphilis accounted for 7, Scurvy 6, Convulsions 2, Apoplexy 2.

TABLE X.—Infantile Mortality. Deaths in Children under one year of age.

	KIMBERLEY.		BEACONSFIELD.		KIMBERLEY AND BEACONSFIELD.	
	White	Coloured	White	Coloured	White	Coloured
January	5	13	2	5	7	18
February	6	16	...	8	6	24
March	4	8	...	6	4	14
April	5	12	2	5	7	17
May	10	12	1	5	11	17
June	2	12	...	7	2	19
July	3	9	1	7	4	16
August	2	10	...	4	2	14
September	5	9	1	4	6	13
October	3	24	1	9	4	33
November	7	20	5	14	12	34
December	12	29	4	11	16	40
Totals	64	174	17	85	81	259

TABLE XI.—Infantile Death-rates.

(White and Coloured.)

				White.			Coloured.		
				No. of Births from Jan. to Dec., 1905.	No. of Deaths in Infants.	Infantile Death-rate per 1,000 born.	No. of Births from Jan. to Dec., 1905.	No. of Deaths in Infants.	Infantile Death-rate per 1,000 born.
Kimberley	...	...	...	514	64	130·3	412	174	422·3
Beaconsfield	...	...	...	133	17	127·8	237	85	362·8
Totals				647	81	125·1	649	259	399·0

TABLE XII.—Comparative Infantile Mortality-rate.

(Kimberley and Beaconsfield.)

				White.	Coloured.	All Races.
1898	...	...	...	197·0	467·0	339·0
1899	...	...	...	212·9	462·5	348·3
1900	...	...	...	202·2	695·4	440·6
1901	...	...	...
1902	...	...	...	220·0	536·5	385·4
1903	...	...	...	145·0	557·6	348·9
1904	...	...	...	152·5	444·4	294·1
1905	...	...	...	125·1	399·0	262·3

TABLE XIII.—Total Deaths under 5 years of age.

(Comparative.)

				KIMBERLEY.		BEACONSFIELD.	
				White.	Coloured.	White.	Coloured.
1898	...	...	...	120	307	40	151
1899	...	...	...	149	313	32	205
1900	...	...	...	141	391	21	277
1901	...	...	...	404	356	44	555
1902	...	...	...	147	287	36	214
1903	...	...	...	80	269	21	203
1904	...	...	...	89	215	19	127
1905	...	...	...	81	270	24	127

TABLE XIV.—Death-rates, 1905.

	KIMBERLEY.			BEACONSFIELD.			KIMBERLEY AND BEACONSFIELD.		
	Popula- tion.	No. of Deaths.	Death- rate per 1,000.	Popula- tion.	No. of Deaths.	Death- rate per 1,000.	Popula- tion.	No. of Deaths.	Death- rate per 1,000.
White ...	14,301	214	14·9	3,011	33	10·9	17,312	247	14·2
Coloured	21,029	840	39·9	15,800	497	31·4	36,829	1,337	36·3
All Races	35,330	1,054	29·8	18,811	530	28·1	54,141	1,584	29·2

TABLE XV.—Comparative Death-rates.

	KIMBERLEY.			BEACONSFIELD.		
	White.	Coloured.	All Races.	White.	Coloured.	All Races.
1898 ...	21·7	53·6	41·4	28·8	57·0	49·6
1899 ...	25·8	51·5	41·3	18·9	57·4	47·1
1900 ...	25·6	87·1	59·1	17·3	91·2	71·1
1901 ...	21·5	60·2	52·9	28·6	119·3	94·6
1902 ...	19·2	43·7	32·4	20·1	63·0	51·7
1903 ...	15·3	42·5	31·5	15·2	44·3	37·8
1904 ...	15·6	32·4	25·6	13·2	34·9	30·0
1905 ...	14·9	39·9	29·8	10·9	31·4	28·1

TABLE XVI.—Birth-rates, 1905.

	WHITE.			COLOURED.		
	Population.	No. of Births.	Birth-rate per 1,000.	Population.	No. of Births.	Birth-rate per 1,000.
Kimberley ...	14,301	514	35·9	21,029	412	19·5
Beaconsfield ...	3,011	133	44·1	15,800	237	15·0
Totals ...	17,312	647	37·3	36,829	649	17·6

Birth-rate of Coloured, excluding Natives in Compounds.

COLOURED POPULATION.			
	Population.	No. of Births.	Birth-rate per 1,000.
Kimberley ...	13,489	412	30·6
Beaconsfield ...	5,890	237	40·2
Totals ...	19,379	649	33·4

TABLE XVII.—(a) Births registered in 1905.

(Classified according to the month in which they occurred).

			KIMBERLEY.		BEACONSFIELD.	
			White.	Coloured.	White.	Coloured.
January	...	...	53	28	8	21
February	...	...	50	34	5	15
March	...	...	49	42	9	19
April	...	...	43	24	11	23
May	...	...	40	42	12	26
June	...	...	42	28	9	20
July	...	...	49	29	15	17
August	...	...	39	31	14	23
September	...	...	38	42	9	23
October	...	...	35	35	17	14
November	...	...	34	46	12	16
December	...	...	42	31	12	20
Totals	...	...	514	412	133	237

TABLE XVII.—(b) Births Classified Sex and Race.

			White.		Coloured.	
			Males.	Females.	Males.	Females.
Kimberley	...	...	270	244	190	222
Beaconsfield	...	...	69	64	129	108
Totals	...	...	339	308	319	330

TABLE XVII.—(c) Births, Legitimate and Illegitimate.

			White.		Coloured.	
			Legitimate.	Illegitimate.	Legitimate.	Illegitimate.
Kimberley	...	...	506	8	251	161
Beaconsfield	...	...	131	2	91	146
Totals	...	...	637	10	342	307

TABLE XVIII.—Inquests 1905, Kimberley.

	White.		Coloured.	
	Males.	Females.	Males.	Females.
<i>A.</i> —Specific Diseases	6	3	87	47
<i>B.</i> —Accidents and Injuries :				
Fall down shaft ... ..	...	...	1	...
<i>C.</i> —Run over, etc. :				
Waggon ... ..	...	...	2	...
Slop water cart ... ..	...	...	1	...
<i>D.</i> —Burnt, etc. :				
Clothes caught fire ... ..	...	...	...	1
<i>E.</i> —Other Accidents :				
Head crushed by truck in mine	...	...	1	...
Blasting accident ... ..	...	...	1	...
Explosion of fire damp	1	...	...	...
Crushed between buffers of railway truck	1	...	...	...
Head struck by falling stone	...	...	5	...
Struck by falling blue ... ..	...	...	2	...
Poisoned by gas and scalded	...	...	1	...
Collision with truck ... ..	...	...	1	...
Explosion of dynamite	3	...	3	...
Crushed by skip	1	...	...	...
Fall of temporary shelter ... ..	...	...	1	...
Knocked down by motor ... ..	...	...	...	1
<i>F.</i> —Violence :				
Fracture of skull (name unknown) ... ..	...	...	2	...
Injuries inflicted by knobkerrie and belt ... ..	...	...	1	...
Fracture of skull caused by bottle ... ..	...	...	1	...
Choked ... ..	...	...	1	1
Slight scalp wound resulting in meningitis ... ..	...	...	1	...
Blow on head inflicted with hatchet ... ..	...	...	1	...
<i>G.</i> —Suicide :				
Bullet wound	4	...	...	...
<i>H.</i> —Miscellaneous :				
Still births	1	...	1	4
Totals	17	3	114	54

TABLE XIX.—Inquests 1905, Beaconsfield.

				White.		Coloured.	
				Males.	Females.	Males.	Females.
A.—Specific Diseases	...	...	...	1	...	26	16
“ Natural Causes ”	...	...	...	...	1	3	1
B.—Accidents and Injuries :							
Electric car, fall from	...	...	...	...	...	...	1
Fall down mine	...	...	...	...	...	6	...
C.—Run over, etc. :							
Street roller	...	...	...	...	...	1	...
Railway truck	...	...	...	...	...	...	1
Truck	...	...	...	...	...	1	...
D.—Burnt : Matches (clothes on fire)	...	...	...	...	...	...	1
E.—Drowned : Bathing	...	...	...	...	...	1	...
F.—Poison : Gas (accidental)	...	...	...	...	...	1	...
G.—Other Accidents :							
Truck falling on deceased in mine	...	...	...	...	...	1	...
Explosion	...	...	...	...	...	3	...
Fall of ground	...	...	...	...	...	27	...
Current of escaping air	...	...	...	...	...	1	...
H.—Miscellaneous :							
Unknown	...	...	...	...	...	1	...
Electric shock	...	...	...	...	...	1	...
Asphyxiated (placed in sanitary pail)	...	...	...	...	...	...	1
Still born	...	...	...	...	...	...	1
Totals	...	...	...	1	1	73	22

TABLE XX (A).—Notifications for 1905.

	KIMBERLEY.		BEACONSFIELD.		DISTRICT.	
	White.	Coloured.	White.	Coloured.	White.	Coloured.
Enteric Fever	30	20	12	1	1	...
Scarlet Fever	156	11	2	1	...	...
Diphtheria	19	5	...	...	...	...
Erysipelas	8	19	1	18	...	...
Puerperal Fever	...	3	...	...	1	...
Smallpox	29	48	3	161	1	10
Leprosy	...	2	...	1	...	...
Chicken-pox	33	17	4	35	2	...
Totals	275	125	22	217	5	10

TABLE XX (B).—Notifications for 1905.
(Classified into Monthly Periods.)

	Enteric Fever.	Scarlet Fever.	Diph- theria.	Ery- sipelas.	Puer- peral Fever.	Small- pox.	Leprosy.	Vari- cella.
January	8	13	...	13	1	...	1	...
February	1	13	...	1	...	...	...	...
March	4	8	1	4	...	...	...	...
April	12	...	1	4	...	...	...	...
May	13	6	6	6	...	90	...	...
June	5	2	5	1	...	26	...	...
July	1	9	4	2	...	48	...	...
August	3	28	...	3	...	48	...	20
September	4	29	5	2	...	38	...	20
October	3	12	...	1	...	2	1	25
November	5	30	1	6	3	...	1	18
December	5	20	1	3	..	...	...	8
Totals	64	170	24	46	4	252	3	91

TABLE XXI.—Mortality in cases of infectious diseases notified in Kimberley and Beaconsfield.

	No. of cases notified.		No. of Deaths.		Mortality percentage.	
	White.	Coloured.	White.	Coloured.	White.	Coloured.
Enteric Fever ...	42	21	8	14	19·0	66·6
Scarlet Fever ...	158	12	1	1	0·6	8·3
Diphtheria... ..	19	5	2	...	10·5	...
Erysipelas ...	9	37	...	3	...	8·1
Puerperal Fever ...	...	3	...	2	...	66·6
Small-pox ...	33	219	...	7	...	3·2
Leprosy ...	...	3	...	...	...	...
Chicken-pox ...	37	52	...	...	...	...

TABLE XXII.—Disinfections for 1905.

			Houses or Rooms.	Bedding and Clothing by Steam.
Enteric Fever ...	...	...	9	1
Scarlet Fever ...	...	...	93	48
Diphtheria ...	...	...	17	4
Erysipelas ...	...	...	13	7
Puerperal Fever ...	...	...	3	3
Small-pox ...	...	...	80	233
Phthisis ...	...	...	3	...
Measles ...	...	...	1	1
Small-pox Contacts	...	...	..	76
Totals	...	...	219	373

TABLE XXIII.—Number of cases admitted to Temporary Isolation Hospital.

			KIMBERLEY.		BEACONSFIELD.	
			White.	Coloured.	White.	Coloured.
Scarlet Fever ...	...	...	6	...	...	...
Erysipelas ...	...	...	1	6	...	8
Totals	...	...	7	6	...	8

(ii) Report of SANITARY INSPECTOR to Borough of Kimberley.

(1) Same as previously reported.

(2). As before, but from January 1st, 1906, the removal of night-soil will be carried out departmentally, thus bringing all the sanitary services under the administration of the Council.

Household refuse is destroyed by fire at the Railway Siding, four miles from the township due North, no nuisance whatever being caused. There has been a marked improvement in the work of the siding during the past two years.

Slop-water is conveyed by a 9-inch stoneware sewer by gravitation to a site two miles from town, where it is utilised for irrigation purposes.

Night-soil is buried in trenches 15 feet x 6 feet x 6 feet, no attempt in past years having been made to utilise it for any useful purpose. An attempt will probably be made now that it is intended to work the pails removal service departmentally.

(4). Dealt with entirely by the Board of Health.

(5). The usual periodical inspections have been made by officials of the Sanitary Department and the usual notices and summonses issued, the number being about the same as in former years.

Special attention has been given to inspection to detect overcrowding, and it can be safely asserted that overcrowding does not exist to any great extent, and there appears no reason why it should do so, owing to the number of empty rooms that are discovered when the inspections are made.

(6). In November the Borough Council adopted sections C and D of the Standard Regulations, dealing with cowsheds, dairies, and milk shops, and for regulating the trade in products of milk; these have not yet been promulgated, but there is no doubt but that their benefits will be felt in due course.

(iii) BEACONSFIELD (MUNICIPALITY).

(1) The water-supply is almost entirely derived from the mains of the Kimberley Waterworks Company. There are a few exceptions when well water is used. The water storage of the Kimberley Waterworks Company is situated without the area of this Municipality.

(2). (a) With regard to the disposal of night-soil, the pail system is adopted. Removals are made every forty-eight hours. Pails are cleansed and disinfected before being replaced.

With regard to (b) slop-water and (c) household refuse, no organised system is adopted by the Council. Removals are directed under the supervision of the officers of the Sanitary Department.

(3). Outbreaks of infectious disease have the attention of the Kimberley Board of Health, and the work in connection therewith is under the control of that body, and under whose instructions the officers of this Council act.

There is no Infectious Diseases Hospital accommodation. All cases of an infectious nature are removed from this area by the Board of Health.

A mild form of Small-pox prevailed during the year. The disease was mainly confined to Natives.

(4). No public abattoirs have been established or are in contemplation.

(5). Meat inspections are carried out by Municipal Police. No report has been received as to detection of diseased or unsound meat.

(6). Municipal Police make daily inspection of premises.

(7). No report has been received of the existence of rats within the limits of this area.

(8). A source of danger to health is the existence of undesirable Natives residing promiscuously in the township. The opinion of this Council is that all Natives should be compelled to reside in locations set apart for that purpose.

(iv) WARRENTON (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from wells and from a river. That from the river is conveyed in an open furrow, which is under control of our Board for about three miles. The water is generally fully adequate, and is pure.

(2). Night-soil is collected and carted out to pits and covered up. Some of the inhabitants dispose of the night-soil in their gardens.

There is no collection of slop-water, and household and other refuse have to be carted out of the village area.

(3). No cases of infectious diseases have occurred, nor do we possess an Infectious Diseases Hospital.

(4). No public abattoirs have been established by the Board. Slaughtering is done about one mile outside the village area.

(5). No inspection of meat is carried out.

(6). No action is required over and above the carrying out of sanitary regulations.

(7). Only field rats are found in this area, and no crusade against them has been carried out.

(8). The Native Location has been removed about a mile outside the village.

KING WILLIAM'S TOWN.

(i) KING WILLIAM'S TOWN (MUNICIPALITY).

*Report of Dr. HENRY M. CHUTE, Medical Officer of Health.

(1). See remarks under heading (a) in report rendered by me in my capacity as District Surgeon.

(2). The system of collection and disposal of night-soil is a pail removal system, most excellently carried out and for a town of under 10,000 inhabitants the best in my opinion that could be devised. The system is quite devoid of all nuisances and the night-soil is conveyed in covered pails to the sanitary trenches where it is buried, and after an interval trees are planted. The plantation of useful timber trees is now large, and year by year increasing, and is a most valuable asset.

There is no system yet in force for the disposal of slops, and it is a serious defect in the sanitation of the town. The inhabitants have no choice but to pour these dangerous fluids into the open gutters or to scatter them about the gardens and back yards. The soil around dwelling-houses is constantly and continuously fouled day by day by this method of disposal, which is, I am convinced, responsible for much of the Enteric Fever and Diarrhoea which has been prevalent. A system of removal should be instituted by the Council.

(3). See remarks under heading (m) in report rendered by me in my capacity as District Surgeon.

(4). See remarks under heading (e) in report rendered by me in my capacity as District Surgeon.

(5). The system of meat inspection is performed by the two Sanitary Inspectors who duly attend the Morning Market and also pay periodical visits to the butchers' shops. Occasionally meat, brawn and sausages have been purchased for examination, and several instances of measly brawn, sausages and pork have been detected. During 1905 there have been several prosecutions for exposure of meat unfit for human food, for sale on the public market, resulting in penalties.

(6). During the year 1905, the system of slaughtering animals for food has been altered. Formerly each butcher had his own slaughter-house, and they were just tin shanties with imperfectly paved floors and insufficient water-supply. The slaughter-houses are now under one building; each butcher has a separate place which is fitted with all modern improvements and excellent water-supply. Floors of cement and drainage are good.

Within the Municipal limits no slaughtering of animals for human food is permitted at any other place.

It is very necessary, in my opinion, for the Council to compel all Natives and coloured people, other than proprietors or Native servants, to live in locations. The number that live in tin shanties in back yards in the lower part of the town is large, by Census figures, 1,630. The overcrowding and unhealthy surroundings favour insanitary conditions.

(ii) BERLIN (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a spring within the village, under the control of our Local Authority. It is pure and not liable to pollution, but inadequate. People resort to their tanks.

(2). No scavenging system exists in our village. Each household attends to its own night-soil, etc.

(3). No infectious disease was reported and no Hospital accommodation exists.

(4). No public abattoirs have been established.

(5). No system of meat inspection is carried out.

(6). No improvement has taken place in regard to sanitary defects.

(7). No steps are taken for the extermination of rats. Many of them are killed in the veldt fires.

(iii) BRAUNSCHWEIG (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from the river running through this area, the source of which is without the area of this Local Authority. Each farmer obtains his supply of water from the river in casks drawn by oxen. The supply has been fairly adequate excepting during the drought of 1905, when the river ceased to flow. Complaint however must be made in regard to the contemplated action of

the Town Council of building a dam at the source of the river. This dam will considerably minimise the flow of water down the river on which the inhabitants of this area are almost entirely dependent for their supply. In times of drought the dam would entirely stop the flow of water. It is imperative that the inhabitants of this area be afforded some protection in the matter.

(2). The disposal of night-soil, slop-water and household and other refuse is carried out privately by each householder.

(3). No cases of infectious disease have been reported. All the public places have been disinfected to prevent any outbreak of disease.

(4). Each farmer does his own slaughtering, there being no public slaughter-houses.

(5). Meat inspection is not carried out in this area.

(8). No complaints have been made in regard to the prevalence of rats.

(iv) BREIDBACH (VILLAGE MANAGEMENT BOARD).

(1). No alteration has taken place.

(2), (3), and (4). Nil.

(5). Rats are not prevalent in this District. No steps were taken by the Local Authority to exterminate them.

(6). No Health Officer is employed.

(v) FRANKFORT (VILLAGE MANAGEMENT BOARD).

(1) and (2). Same as last report.

(3). An outbreak of Small-pox made its appearance on farm "Woodlands" in this area at the end of the year 1904. The cases were treated by the District Surgeon, and quarantine for a period of twenty-one days was enforced. Vaccination was also carried out, and up to the present no fresh cases have been reported. The health in general is good.

(vi) HANOVER (VILLAGE MANAGEMENT BOARD).

No important alterations have been made since the last report.

No cases of infectious disease have been reported, and the health of the inhabitants has been good.

(vii) KEISKAMA HOEK (MUNICIPALITY).

(1). Since last report regulations under Section 17 of the Public Health Act of 1897 have been put in force to protect the town water-supply against pollution outside the Municipal area.

(2). Regulations are now in force to enable the Town Council to deal with sanitary matters, and a system will be introduced as soon as possible to carry same into effect.

(3). No outbreak of infectious disease has occurred.

(6). No Health Officer has been appointed.

(viii) PEELTON (VILLAGE MANAGEMENT BOARD).

No report furnished.

(ix) PIRIE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply of this village remains unaltered. The water, which is pure in quality, is conveyed for domestic purposes from the river in casks.

(2). There is no system of night-soil removal. The disposal of household refuse is better looked after by the inhabitants than formerly.

(3). During the period June to September, 1905, an outbreak of Enteric Fever occurred among children. The District Surgeon investigated the outbreak, and in consequence thereof three closets were erected for school children.

(4). No public abattoirs have been established.

(5). All those found polluting the water are punished by the Board.

(6). There are no butchers in this area, the meat being bought from King William's Town.

(7). Rats and mice are not prevalent.

(8). No Health Officer is employed by the Board.

(x) 'UMNXESHA (VILLAGE MANAGEMENT BOARD).

No report furnished.

KNYSNA.

KNYSNA (MUNICIPALITY).

*Report of DR. GEORGE MARR, Medical Officer of Health.

(1). The town of Knysna is still dependent on the rain water, collected in tanks and barrels, for its water-supply. There are a few wells from which the poorer classes obtain a supply during any season of drought, such as we had towards the end of 1905. The Residency and Gaol have a good supply brought in pipes from a spring. Despite the drinking of water laden with dust and other impurities from the roofs of houses, we enjoy an immunity from infectious diseases much greater than in many places where there is a proper water-supply.

(2). Night-soil is dealt with by the bucket system, and is removed some miles beyond the town. The method is satisfactory.

Slop-water is often thrown out in gardens, etc., or put into holes and these filled up.

Household and other refuse, *e.g.*, from streets, are removed by the Municipality, and the town is kept free of rubbish heaps.

(3). There have been six cases of Diphtheria during the last eighteen months, one of Enteric Fever and one of Scarlet Fever, all sporadic. Isolation was instituted in every case, and in no instance did another person become infected.

There is no Infectious Diseases Hospital, but the Contagious Diseases Hospital stands vacant, and might be used as such (and was so in one instance).

(4). There is no public abattoir. Slaughter-houses are outside the town, and there is no nuisance connected therewith.

(5). No system of meat inspection is carried out.

(6). The condition of some of the open sluits that carry off the surface water has been reported on, but it has not been found possible to remedy certain defects.

(7). There are again plenty of rats in the town, although not so many as before the Plague outbreak. Nothing is being done to exterminate them.

KOMGHA.

KOMGHA (MUNICIPALITY).

(1). The source of the water-supply is a spring within the area and under the control of the Local Authority. There is no system of storage, and the water is taken as it emerges from the springs. The supply is ample, pure, but liable to pollution. Many householders collect rain water in tanks, and also store in underground reservoirs.

(2). No regular system for the disposal of night-soil is in force. Each householder attends to his own household refuse, which must, however, be deposited on the officially authorised spots under penalty.

(3). We have been absolutely free from all infectious disease during the year and a half ended 31st December, 1905, with the exception of one case of Measles. No decisive steps were taken in prevention beyond seeing that nuisances are dealt with as they occur, and no refuse or insanitary conditions allowed to exist. No sanitary Inspector is employed. No Infectious Diseases Hospital accommodation is provided.

(4). No public abattoirs have been insisted on, but existing requirements and conditions as to the slaughter of stock are satisfactory, the killing being all extramural, and only the carcasses entering the town. The shops for sale, counters, premises, and conditions are all satisfactory, and special attention to this has been enforced on butchers.

(5). There is no system of meat inspection, and no detection has been reported of diseased and unsound meat. No official has been appointed to exercise functions of Inspector. Butchers, however, have not given grounds for suspicion in this direction.

(6). Sanitary defects have been dealt with promptly as reported, and defaulters have been prompt and ready in obedience to orders. There is no deliberate pollution of water, but regular cleansing and inspection are relied upon. No accumulations of filth or noxious matter is permitted, which must be removed daily to authorised deposits. One or two cases of supposed overcrowding were dealt with

by official warning at once. The Magistrate lends police aid freely for any ameliorative object of this kind. There are no dwellings or locations that can strictly be termed unhealthy, and there are considerable spaces usually intervening between dwellings.

(7). Rats are not aggressively numerous. There is no complaint and no apprehensions regarding them, and no systematised projects for the extermination.

(8). The health and sanitation seem generally good, to judge from almost total immunity from outbreaks of disease. Our two local medical men are extremely attentive to sanitary matters. The locality owes its immunity chiefly to its naturally healthy situation and conditions. The Local Authority does not employ a Health Officer.

LADISMITH.

(i) LADISMITH (MUNICIPALITY).

(1). The water-supply is obtained from a perennial stream from the Klein-zwarteborgen, north of the town, which runs into a reservoir close to the town, from where it is carried all over the village by a piping system.

The water-supply is quite adequate for both domestic and irrigation purposes, and as pure as water can be. The source is on "Crown Land," and under the control of the Local Authority.

(2). Every householder is compelled by regulation to have a proper closet with a proper pail, the night-soil being removed at night by a contracting party.

Slop-water and household refuse are being removed privately.

(3). Several cases of Diphtheria and Enteric Fever have been reported by the District Surgeon, but not having been of a serious nature no preventing steps were taken by the Local Authority.

We have no infectious diseases Hospital accommodation.

(4). We have not established any public abattoirs, and do not contemplate doing so.

The slaughtering takes place on directed sites on the commonage, out of town, and the meat is carted into the village.

(5). No inspection of meat is made.

(6). The village, which is not of a great extent and population, is being kept in a proper sanitary condition, consequently there is no requirement of remedying any sanitary defects.

(7). We have no rats in town.

(8). No Health Officer is employed by the Council.

(ii) VAN WYKSDORP (VILLAGE MANAGEMENT BOARD).

No report furnished.

LAINGSBURG.

LAINGSBURG (MUNICIPALITY).

(1). The village water-supply is obtained from surface wells and an open furrow, which is liable to pollution. Several householders have galvanised tanks for collecting rainwater.

(2). (a) Night-soil is regularly removed by a contractor, the pails being emptied into large casks on a waggon. These are emptied, and the contents deposited into trenches, about a mile outside the village.

(b) No provision is made for removing slop-water. The Local Authority intends making provisions for same at an early date.

(c) Household refuse is also removed by contract, other refuse is removed by individuals themselves, both being deposited outside the village.

(3). Only one case of Enteric Fever, one of Diphtheria, and three cases of Varioloid (Small-pox), were reported. The Enteric and Diphtheria cases were isolated and treated at their private residences; for the Small-pox cases a temporary isolation tent was erected outside the village.

(4). There are three butcheries in the village, which are clean and well kept, there is no public abattoir. Slaughtering is done outside the village, of which occasional inspections are made, with good results.

(5). The Local Authority supplies coaltar gratis (when applied for), for disinfecting sanitary pails. There is much room for improvement in sanitation, which the Council is desirous to make good, as far as their pecuniary means will allow.

(6). All cesspools in the village have been closed, a cart is sent round twice a week to remove papers and other rubbish from the streets and open spaces.

Regulations have been framed with the view to preventing the discharge of slop-water or other filth into the water sluits.

The notification of infectious diseases is insisted upon, and when a case is notified the Sanitary Inspector is instructed to visit and inspect the premises, and carry out any necessary disinfection.

The Health Act of 1897 has been adopted with the Government's approval.

(7). Rats are not very prevalent within the boundaries of the Municipality.

(8). The provision of proper accommodation for the inhabitants of the Location, and the sinking of a well for them, is under consideration.

No Health Officer is employed by the Municipality.

MAFEKING.

MAFEKING (MUNICIPALITY).

(1). Water-supply.—Source is from springs two miles north-east of the township. The supply is controlled by a local limited company. The springs are situate about $1\frac{1}{2}$ miles outside of Municipal limits. The water runs for about a mile in an open furrow, thence into reservoirs, and from the reservoirs is conveyed into town in iron pipes. The supply is totally inadequate for the wants of the town. The water has not proved to be impure, but the quality has recently been the subject of investigation by the local District Surgeon, and the Medical Officer of Health for the Colony.

(2). Night-soil, slop-water, and household and other refuse are removed every second night (in the case of hotels and public institutions every night), and deposited in pits nearly two miles north-west of the township.

(3). Beyond an occasional case of Enteric and a mild epidemic of Measles the town has been free from infectious disease. The Lazaretto was erected in 1901, but has never been used. It is inspected periodically, and at present is in a fair state of repair, and available at a few hours notice for the reception of any infectious cases.

(4). No abattoirs have been established, neither are any such contemplated at present. Slaughtering is carried out in buildings situate about a mile from town. Such buildings possess cement floors, and although not altogether satisfactory, they comply with the restricted powers of the Municipality.

(5). The Council is not satisfied with the present system in vogue regarding the slaughtering and sale of meat, and at present is in communication with the Medical Officer of Health on the subject.

(6). The Council from time to time appoints from amongst its members a Special Inspection Committee. This Committee inspects every house and yard in the town. This in addition to the ordinary supervision and direction of the Sanitary Inspector's Department has resulted in the town being kept in a good sanitary state.

(7). 6d. per head is paid for rats, and about 30 per month are secured in this way. These are paid for out of ordinary revenue, representations to the Government for contribution having up to the present failed; this, notwithstanding, the Council decided to continue in their efforts to exterminate.

MALMESBURY.

(i) MALMESBURY (MUNICIPALITY).

*Report of Dr. V. W. T. WERDMULLER, Medical Officer of Health.

(1) and (2). The same remarks apply to these headings as contained in the health report for the preceding half-year of 1904.

(3). Infectious diseases have not been very prevalent during the eighteen months under report, and consisted of the following:—

	Whites.		Coloured.		Total.
	Male.	Female.	Male.	Female.	
Typhoid	6	1	0	2	9
Diphtheria... ..	1	3	1	1	6
Scarlatina	2	2	0	0	4
Leprosy	1	0	0	0	1
	10	6	1	3	20

This compares very favourably with those of the preceding half-year when there were of Typhoid Fever alone 30 cases. Cases of Diphtheria, Scarlatina, and Leprosy occurred during the above period, whereas in the preceding half-year one case of Small-pox, several of Whooping Cough and Mumps were notified. The notifications also show the comparative absence of infectious diseases (excepting Tuberculosis) amongst the coloured class, which is no doubt attributable to the better supervision of dwellings and yards by the Sanitary Inspectors of the Local Authority.

(7). Rats have no hold at present in Malmesbury.

The following births were registered:—

	European.	Coloured.	All Races.
Male	29	41	70
Female	25	46	71
Total	54	87	141

The following deaths were registered:—

Phthisis, E. 2, C. 12; Pleurisy, C. 1; Pneumonia, E. 1, C. 7; Whooping Cough and Pneumonia, C. 1; Atelectasis Pulmorum, E. 1; Softening of Brain, E. 1; Apoplexia Hæmorrhagica, E. 1; Simple Meningitis, E. 1, C. 1; Tubercular Meningitis, E. 1, C. 2; Enteritis and Gastro Enteritis, E. 3, C. 12; Dysentery, E. 1; Hæmorrhage from Bowels, C. 1; Marasmus, E. 2, C. 3; Carcinoma, E. 1, C. 1; Gangrene, C. 1; Bright's Disease, E. 1; Premature Birth, C. 3, and Accident, E. 1, C. 2. Total, E. 17, C. 47.

Here also as in the last report, attention must be drawn to the fact of the large number of deaths due to Tubercular disease, for a goodly number of the cases, attributed to Chronic Enteritis and Marasmus might safely come under the category of tubercular disease, which is chiefly due to overcrowding and inefficient ventilation.

The large number of cases of Enteritis also calls for comment and prevails in those children who are reared artificially, and these hand-reared infants are also specially prone to tuberculous disease.

(ii) DARLING (VILLAGE MANAGEMENT BOARD).

(1). A watercourse about ten feet wide and about eight feet deep passes through the village from south to north. In this "sluit" there is a good flow of water during the winter months, but in summer it is practically speaking dried up half way. There is, however, a point in this "sluit" more or less in the centre of the village, where water oozes out from the eastern bank. This water is, a little lower down, diverted from the "sluit" into a dam by means of a small open furrow. The supply is adequate, but liable to pollution.

At the point in the "sluit" where the water oozes out, a galvanised iron frame, about five feet square and eight feet deep, has been sunk on the eastern bank. This water was intended for a domestic supply, but it proved unfit for drinking and household purposes. There is, therefore, no domestic supply of water.

The actual source of the water is not under our control, but situated within the area of our authority.

(2). The collection and disposal of night-soil are carried out by a contractor.

Slop-water and other household refuse are removed by private means.

(3). There has, as yet, been no infectious disease prevalent in this village.

Hospital accommodation has not yet been provided for infectious diseases.

(4). There are no public abattoirs established at Darling. Slaughtering is mostly done outside the village. Meat is sold in butchers' shops, which are kept in good order.

(5). There is no system of meat inspection carried out here.

(6). Sanitary defects.—The only public sanitary arrangement in existence at present is the removal of night-soil. This is carried out in a proper way. To prevent, as far as possible, the pollution of water, notices have been put up at different points of the “sluit” warning the public not to deposit therein refuse in any shape or form. Anybody found violating this notice is prosecuted.

(7). To the best of our knowledge no rats exist in the area of this Local Authority.

(iii) HOPEFIELD (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is sufficient for the wants of the village of Hopefield, the water being pure and good, no disease having been traced to a polluted supply of water within the area of the Board's Authority during the eighteen months, July, 1904, to December, 1905. The supply for the eastern half of the village is drawn from several underground tanks or cisterns, but chiefly from two springs enclosed at their source, the latter situated on the western side of the village; the said springs, as also the catchment area supplying these springs, besides numerous others on the western side, from which potable water is drawn, being under the control and authority of the Board.

The water is collected in holes or reservoirs in the ground—these being virtually the sources of the springs—and is conducted thence by iron piping to iron and wooden tanks, and from these again by iron piping to standpipes or taps in different parts of the village. The springs, though often cleaned, quickly develop a slimy greenish matter, which hitherto, as far as the Board is aware, is not injurious to health.

(2). (a) The collection and disposal of night-soil are no longer left to the individual, but are undertaken by the Board, and deposited at a safe distance from the village.

(b) No provision has yet been made for the disposal of slop-water, which is thrown out in the spacious yards or gardens, where it evaporates.

(c) Household and other refuse are supposed to be removed by householders or occupiers of property. In many cases, more particularly by the coloured people, the refuse is burnt.

(3). The only infectious disease the Board has to record during the eighteen months was an outbreak of Small-pox in the village in October, 1904. One individual—a girl—was attacked, but prompt measures, quarantining the patient and segregating contacts, entailing a cost to the Board of £55 9s., of which the Government contributed one-fifth only, instead of the usual four-fifths, prevented the spread of the disease.

Beyond this no other infectious disease has occurred during the above period within the area of the Board's authority. No infectious diseases Hospital accommodation exists, tents supplied by the Malmesbury Divisional Council being used for the above-mentioned outbreak.

(4). The Board has not established any public abattoirs. The local butchers do their slaughtering some distance outside of the village.

(5). No system of meat inspection is carried out, but additional rules, which will enable the Board and others to exercise close supervision over sellers of unsound food for human consumption, were forwarded to the Government for their approval some months ago.

(6). The water-supply, judging by appearances and the general health of the community, is pure and good. Overcrowding may exist in some instances, and this, with some dilapidated hovels and gravel pits filled with filth in the centre of the village, is at present engaging the attention of the Board.

(7). No rats have as yet made their appearance in Hopefield.

No Health Officer is employed by the Board.

(iv) MOORREESBURG (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a public well situated within the limits and under the control of the Board. The supply is adequate for the village, and pure.

(2). A sanitary contractor is employed by the Board for the removal of night-soil, household and other refuse, who goes his regular round once a week. Every householder has to have adequate privy accommodation and a dust-box or dustbin for the removal of house refuse. No slop-water is removed.

3. During the eighteen months under report two cases of infectious disease (Small-pox) have occurred. A galvanised iron house has been erected in a convenient place outside the village, where these two cases were accommodated and treated by the local doctor.

(4). A piece of ground outside the village has been assigned to butchers where their kraals are, and where their butchering is carried on monthly and inspected by two members of the Board, to assure cleanliness.

(5). No inspection of meat is carried on.

(6). In two cases actions in local court have been taken against offenders, *re* sanitary defects and accumulation of filth.

(7). No steps have been taken to exterminate rats.

(v) RIEBEEK KASTEEL (VILLAGE MANAGEMENT BOARD).

There are no alterations to report since the last report was rendered. During the year 1905 four cases of Enteric were notified, one proving fatal. The village is in a good state of health.

(vi) RIEBEEK WEST (VILLAGE MANAGEMENT BOARD).

No report furnished.

MIDDELBURG.

MIDDELBURG (MUNICIPALITY).

*Report of DR. H. HOLZMANN, Medical Officer of Health.

(1). Please see remarks under heading (a) in report rendered by me in my capacity as District Surgeon.

(2). Please see remarks under heading (e) in report rendered by me in my capacity as District Surgeon.

(3). Please see remarks under headings (l) and (m) in report rendered by me in my capacity as District Surgeon.

(4). Slaughtering is carried out under the provisions of the Sanitary Regulations framed under seventh section of the Public Health Act of 1897.

(5). No system is adopted for the inspection of meat.

MOLTENO.

MOLTENO (MUNICIPALITY).

(1). The water-supply is obtained from bore-holes and pumped into a cement reservoir, from which it is led in iron pipes to the town. The water is of good quality.

(2). Each house has a pail which is removed weekly.

Slop-water is removed every day in proper carts.

Household and other refuse are removed in carts twice a week.

(3). A few cases of Typhoid Fever of a mild nature occurred and were dealt with privately.

Six cases of Small-pox occurred during August and September, 1905, and were treated in a private hospital under the supervision of the Medical Officer of Health appointed for the time.

(4). No public abattoirs have been established. Slaughtering is done in proper houses.

(5). No system of meat inspection is carried out.

(6). Thorough disinfection, under the supervision of the District Surgeon, is carried out where cases of infectious disease are reported.

(7). Very few rats abound in this area, and no trouble is experienced in connection with them.

MONTAGU.

MONTAGU (MUNICIPALITY).

(1). The water-supply for domestic purposes is conveyed from a distance of about two and a half miles from the village in a cast iron main, and distributed in galvanised pipes in the village, and is under the control of the Municipality.

The supply originates from natural springs in the mountain, and provides an adequate supply, and is also free from pollution; the area being within the Municipal limits is reserved for this special purpose.

(2). Night-soil is collected by means of a sanitary cart with tank, between the hours of 10 p.m. and 5 a.m., and deposited in a covered sanitary pit on the outskirts of the village.

Refuse is collected by a sanitary cart, and used for filling up disused brick-fields on the outskirts of the village.

(3). The prevalence of infectious disease has been normal during the past term. A building has been acquired and set apart by the Council to serve as a Hospital.

(4) and (5). Slaughtering is carried out on the commonage, and inspected by the Council's officers. No detection of unsound meat has occurred.

(6). Periodical inspections are made and watercourses cleaned and filth removed immediately.

Rats are not prevalent within this area.

MOSSEL BAY.

(i) MOSSEL BAY (MUNICIPALITY).

The Council does not employ a Medical Officer of Health, but employs one Sanitary Inspector to look after the health and cleanliness of the town.

All the sanitary arrangements and other matters relating to the health of the town are the same now as they have been for the past three or four years.

(ii) HERBERTSDALE (VILLAGE MANAGEMENT BOARD).

During the eighteen months under review the inhabitants enjoyed perfect health.

(1). The water-supply was moderate, but the fountain, which supplies the furrow with water during the drought, is outside the area of our Local Authority. The water in rainy season is sufficient, pure, and runs in an open furrow.

(2). Night-soil is buried in the gardens; all other refuse is burned.

(3). No infectious disease has prevailed.

(4). The slaughtering place is outside the village and under the supervision of the Board.

(6). Only one family is allowed to dwell in a house.

(7). No rats trouble the place.

MURRAYSBURG.

MURRAYSBURG (MUNICIPALITY).

(1). The water-supply is obtained from the following sources:—(a) Springs on the adjoining farm Vleiplaats. The water runs along the river bed for a distance of about two miles, where it is dammed up and then brought into town by an open water-furrow about $1\frac{1}{2}$ miles in length, which of course is liable to pollution. It is mostly used for irrigation purposes and fails totally in times of drought. (b) Wells: Both public and private. The Council and private persons were compelled to resort to these wells—generally with the assistance of windmills—on account of the failure of the spring water. (c) Tanks: Rain water thus collected is exclusively used for consumption.

(2). Cesspools are principally in vogue, which also provide a means for the disposal of slop-water. Household and other refuse are removed by a Municipal contractor employed for the purpose.

(3). There has been no severe epidemic of infectious disease for some years past, and such cases as have occurred were of a very mild form, very few deaths having occurred.

(4). No abattoirs have been established, owing to slaughtering being carried out on a very small scale some distance out of the town on the commonage.

(5). As yet the Council see no necessity of instituting a system of meat inspection, the meat sold being usually fresh.

(6). The Council causes frequent inspection to be made of all premises, privies, furrows, dams, etc., and takes immediate steps against all defaulters.

(7). Rats have not been observed to prevail in the district of the Local Authority.

OUTDSHOORN.

(i) OUTDSHOORN (MUNICIPALITY).

*Report of DR. R. M. TRUTER, Medical Officer of Health.

(1). Water-supply.—This has been fully gone into in a previous report. The supply has proved to be adequate and of the purest quality.

(2). The system of collection and disposal of:—(a) Night-soil.—The pail system is in use, which answers well. The pails are collected weekly (except in the case of public schools and some other places, which have a daily removal), and disposed of in trenches about a mile out of town.

It is desirable that the whole town be placed under the Municipality, which is under consideration at present. As it is, only about 700 premises are now served by Municipal pails; the balance of about 2,000 premises are served by private contractors, which are difficult to control.

(b) Slop-water is collected in covered carts daily, and disposed of on the same site as the night-soil.

(c) Household and other refuse are collected daily, and disposed of on the same site.

(3). The following cases of infectious diseases have been notified:—

From 1st July, 1904, to 31st December, 1904.—Typhoid Fever, 4; Phthisis, 14; Diphtheria, 1; Erysipelas, 4; Scarlet Fever, 1.

From 1st January, 1905, to 31st December, 1905.—Typhoid Fever, 25; Phthisis, 16; Diphtheria, 12; Erysipelas, 4; Scarlet Fever, 2; Puerperal Fever, 4.

In connection with the above, it must be mentioned that many of the cases are brought from the country into the town; this especially refers to Typhoid Fever cases. House to house inspections are made, and the source of infection traced as far as possible, to remedy any defect where possible. Disinfectants and special pails are supplied. The infected premises are duly fumigated.

There is no accommodation for infectious diseases, beyond a rough camp for Small-pox cases.

(4). The Local Authority intends putting up a public abattoir; at present each butcher has his own slaughter-house. The buildings are of corrugated iron with cement floors, erected out of the town on land suitable for drainage and disposal of waste products. These are regularly inspected by the sanitary staff.

(5). There is no regular inspection of meat at the slaughter-houses, but surprise visits are made, and all foodstuffs brought to the market are examined. 3,305 lbs. fish, 285 lbs. meat, etc., have been seized and destroyed as unfit for consumption.

(6). The action taken to remedy sanitary defects has been the inspection of dwellings; 1,375 notices have been served on owners and occupiers to remedy defects, and in many instances to close dwellings. Filth accumulations are removed by the Sanitary Department.

(7). Rats are not found here.

(8). I would draw attention to the marked decrease of Typhoid Fever in the town, and to the immunity of epidemics in public schools and town generally.

(ii) CALITZDORP (VILLAGE MANAGEMENT BOARD).

*Report of DR. LAURENCE F. McDOWELL, Medical Officer of Health.

(1) There is no alteration in regard to the water-supply. I would again draw attention to the fact that most of the household washing is carried out in the rivers, supplying this village with water, and drastic measures should be adopted to stop this.

* Forwarded by Municipality for publication.

(2). (a) Night-soil is removed by the bucket system once weekly. I would strongly recommend that the buckets should be taken out of the village and properly cleaned, and replaced after having a coating of lime. Under the present system buckets are carelessly emptied, and excreta runs over edge and adheres to sides, and they are then replaced in this condition, which is a menace to public health and most objectionable.

(b) and (c) Same as previously reported.

(3). There have been very few cases of infectious disease within the last eighteen months.

(4). There is no public abattoir. Slaughtering is carried out within a satisfactory distance from dwelling houses, and is properly managed.

(5). No regular inspection of meat is made, but in any suspicious case the police have instructions to make full inquiries.

(6). I would again strongly recommend that the Board's area be enlarged. As I mentioned in my 1904 report, it is impossible to have this area in a satisfactory condition when its surroundings are in an insanitary state.

(7). There are no rats.

(iii) DYSELSDORP (VILLAGE MANAGEMENT BOARD).

No alteration or any improvements have been made during the past year. The water-supply, as also the disposal of night-soil, slop-water, and household refuse, is as previously reported.

PAARL.

(i) PAARL (MUNICIPALITY).

*Report of Dr. JNO. O. HEYNS, Medical Officer of Health.

(1). The township of Paarl has a good and abundant water-supply coming through pipes from the two reservoirs within the Municipal area, one of which has been renovated and supplied with a concrete bottom. The water is pure and not liable to pollution.

(2). All household and other refuse are by the owners taken to places pointed out by the Council.

The Sanitary Regulations have been sanctioned by the Government.

All streets, sluits and side-walks are regularly swept and cleaned, and carts are kept to have the filth brought to places pointed out by the Council.

The sanitary pail system is still under consideration.

(3). Infectious diseases have not been prevalent in the past year.

There have been a few isolated cases of Diphtheria, and at present there are some cases of Typhoid Fever.

These are being properly cared for at their homes

(5). Two Sanitary Inspectors are appointed to inspect all places and report on same at every Municipal meeting.

(6). Much has been done in the past year and is still being done to improve the drainage system of the Paarl.

The Lady Grey Street has been thoroughly drained by means of cement pipes, which lead down to the Berg River.

At present the Main Street from the Town House to Rose Street is being drained by means of open drains with kerb and channelling.

(8). A Health Officer is employed by the Municipality.

(ii) FRENCH HOEK (MUNICIPALITY).

(1). The drinking water comes from springs situate on the mountain slopes to the south-east of the village, within the area, and under the control of the Local Authority. The water is brought down from the springs and distributed (in part only of the village as yet) by means of pipes, is quite pure, and the supply adequate.

(2). Night-soil is disposed of by means of a pail system and buried outside the limits of the village.

(3). Enteric Fever prevailed here towards the close of 1904 and beginning of 1905. The cause was ascribed to impure water. Effective steps were immediately taken by the Council, and since the laying of pipes a recurrence has not taken place.

(4). There has been no necessity for the Council to think of establishing public abattoirs. Slaughtering is at present carried out under the existing Sanitary Regulations outside the village, to the satisfaction of the Council.

(5). No complaint has as yet been made in regard to any of the butchers' meat, and, therefore, no system of inspection has been organised.

(6). Such action in connection with the water-supply has been taken as described in (1). A Sanitary Inspector has been appointed, and a close watch is kept generally over everything that may in any way endanger the healthy condition of the town.

(7). Rats are conspicuous by their absence.

(iii) WELLINGTON MUNICIPALITY.

(1). The water-supply is obtained from the Spruit River, having its source in the Hawequas Mountains. The source is not within the Municipal area, and therefore outside the control of the Local Authority.

The water is carried in iron pipes from an intake point up the river for a distance of two miles into a reservoir, situate on the boundary of the Municipality, from where it is supplied to the inhabitants through a proper system of pipes. The water is pure and not liable to pollution. Since the reservoir was constructed, in 1884, with storage capacity of 2,900,000 gallons, the population has increased by 75 per cent., and for some years the question of an increased supply has occupied the serious attention of the Council. An excellent site was acquired for the construction of an additional reservoir, a good deal of preliminary work done, the Government approached under the Loans Act, the construction of this most necessary work made most clear, everything required by Government complied with—and yet, as the Council have reason to believe, through a mere technicality, the Government refused to supply the fund.

(2). Night-soil, household, and other refuse are regularly removed out of the town.

(3). Some isolated cases of Enteric Fever occurred in the town, also an outbreak of Small-pox, "Amaas," which was dealt with in a camp erected for this purpose, and it was duly stamped out, since then no further cases appeared. No Infectious Diseases Hospital accommodation has been provided.

(4). The Council has not established any public abattoirs, and has no intention doing so at present. Slaughtering is done by each butcher separately.

(5). The Sanitary Inspector carries out the inspection of meat exposed for sale.

(6). All sanitary defects as found were remedied.

(7). Rats are found here, especially in the river; steps have been taken to destroy the same.

(8). No Health Officer is employed, the District Surgeon acting as such.

PEDDIE.

PEDDIE (MUNICIPALITY).

(1). The only water-supply available in this Municipality is that collected from the roofs of dwellings by underground and galvanised iron tanks.

(2). Night-soil, slop-water, and household and other refuse are collected and disposed of as in former years—no change having been made in this respect.

(3). The Municipality has been remarkably free from outbreaks of infectious disease since last report, not one case having been reported at this office during that period.

(4). The Council has not established any public abattoirs, nor do they contemplate doing so. Slaughtering is at present carried out in the open at spots some distance from the town.

(5). No system of meat inspection is carried out.

(6). Besides the ordinary slight sanitary defects, which are being continually detected and remedied, no defect has necessitated action worthy of mention.

(7). No steps have been taken for the extermination of rats, they being very scarce within the area of the Municipality.

PHILIPSTOWN.

(i) PHILIPSTOWN (MUNICIPALITY).

(1). For irrigation purposes water is derived from a strong spring in the sluit running through the commonage, and conveyed to the erven in galvanized iron furrows. Drink water and water for domestic purposes is pumped from a strong borehole a few yards from the old well. The water is drawn from a depth of about sixty feet, and the hole has been lined so as to exclude surface water as far as possible. The Council has called for tenders for an extensive scheme to pump the water from this borehole to a reservoir about 1,750 feet from the hole, and to convey it in pipes through the town. Several private householders still use tanks for rain water.

(2). The pail system, introduced some time ago, is still being carried out satisfactorily. Excrement, as well as household and other refuse, is carried away by a contractor twice a week, and deposited at a safe distance outside the limits of the town.

(3). Several cases of Enteric Fever were reported during the months of November and December, 1905, and every precaution was taken to prevent further outbreaks.

(ii) PETRUSVILLE (MUNICIPALITY).

(1). The water-supply for drinking and household purposes is permanent, pure, and ample, and is obtained from a spring, situate above the township on a much higher level. A sufficient number of hydrants has been erected in different parts of the town, and the general drinking supply of water is conveyed direct from the spring in a four-inch pipe to a reservoir, and thence in two-inch pipes to the said hydrants. The supply in the pipes cannot become stagnant or polluted, owing to the arrangement to take water first from the four-inch pipe for the supply of the town, and then return the remainder or overflow (which is continually running) to the aforesaid reservoir. The overflow from the hydrants into the reservoir is then used for irrigating the village erven. The entire spring is enclosed with stone and cement, and the top roofed in. To enable it to be regularly cleaned or inspected it has to be entered from the top by means of a trap-door; this trap-door is always kept locked. Owing to these precautions, it follows that no pollution of the drinking water can take place, and therefore the inhabitants may always depend upon receiving a pure supply, which, it is thought, justifies the large expenditure incurred by the Council. The whole water supply of the town is within the area and under the control of the Municipality.

(2). The collection and disposal of night-soil is done by contract twice a week. Night-soil is deposited at a safe distance outside the limits of the township. The pail system is compulsory, and answers well. The Municipal cart goes round twice a week, and collects and takes all household refuse to a site selected for that purpose, a considerable distance outside the limits of the town. The sluit on the outskirts of the village, which was formerly used as a depositing site for all kinds of rubbish, has been abolished. The Council has not yet made any arrangements for the collection and disposal of slop-water.

(3). The general health has been very good. Nine cases of infectious diseases were reported during the eighteen months ended 31st December, 1905. In order to cope with outbreaks of infectious diseases among the Coloured folks an isolation hospital is established outside the township, under the management and direct control of the Council. The Assistant District Surgeon at Petrusville acts as Health Officer for this Municipality as circumstances require.

(4). The public shambles, or place fixed for the slaughtering of animals for human consumption, is outside the town, and on the other side of the "Groot Slood." No sheep, goats, or cattle, etc., are allowed to be slaughtered inside the township. Butcher's shops and similar premises are inspected once a week, and any defects in sanitary arrangements at once reported to the Municipal Clerk. No diseased and unsound meat have yet been detected.

(5). No sheep or goat kraals are allowed within the township, and kraals used for other purposes have to be cleaned, and all foreign material or loose matter removed once a week. Privies, backyards, and stables are inspected twice a week, and any defects in sanitary arrangements at once reported.

(6). The town has been kept in a fair state of cleanliness, and the sanitation, as carried out, is considered satisfactory, and sufficient for the present requirements of the population.

(7). There are no rats in this area.

PIQUETBERG.

(i) PIQUETBERG (VILLAGE MANAGEMENT BOARD).

No report furnished.

(ii) PORTERVILLE (MUNICIPALITY).

No report furnished.

PORT ELIZABETH.

PORT ELIZABETH (MUNICIPALITY).

(1). Source.—The water-supply of Port Elizabeth has for several years been derived from Van Staaden's River, about thirty miles to the west of the town, where a storage reservoir is situated, capable, when full, of holding thirty million gallons of water; the reservoir is supplied by several small streams, and the water is filtered before delivery. This supply is supplemented by a pumping station, four miles lower down the Van Staaden's Valley, where the water is pumped from a small reservoir on the river into the leading mains, between the before-mentioned reservoir and the town. In December last the first instalment of the supply from the new sources at the Sand, Palmiet and Bulk Rivers was received in town, being the present flow of the Bulk River only intercepted by a small intake above the site of the dam in Bulk River Valley now in course of construction. During the present year this supply will be augmented to its permanent capacity.

Ownership.—The works are the property of the Port Elizabeth Municipality, and all the sources are outside the Municipal area.

Collection, etc.—In reservoirs formed by damming the valleys at various points.

Distribution.—By cast-iron or steel mains from the works to the town and throughout the town by cast-iron mains and lead service pipes.

Adequacy of Supply.—The supply has proved sufficient for the actual necessities of the town during the past Summer, and it is anticipated that there will be an ample supply for all purposes before next summer.

Purity.—The water is uniformly of excellent quality and there is no liability to pollution.

(2). (a) Night-soil.—Partly disposed of by water closets leading into sewers discharging into the sea, but principally by pan service collected in closed wagons and buried outside the town.

(b) Slop-water.—Where no drain connection, collected in special tumbler cans, made for the purpose, and discharged into a sewer, the sea or the night-soil deposits.

(c) Household and Other Refuse.—The refuse collected in the town is carted to railway siding, tipped into trucks, and, under agreement between the Cape Government Railway and the Harbour Board, run out to Drift Sand, at the south of the town, where it is utilised by the Forestry Department by covering up the sand, the area being subsequently planted.

(3). During the year ended December 31st, 1905, the following cases of infectious diseases were notified:—

Disease.	Europeans.	Coloured.	Total.
Enteric Fever	76	17	93
Scarlet Fever	41	1	42
Diphtheria	3	2	5
Plague	2	5	7
Tuberculosis	37	103	140
Erysipelas	7	—	7
Puerperal Fever	2	—	2

On receipt of Notification Certificate an Inspector calls at the patient's house to make enquiries as to the probable source of infection, and to report on the sanitary condition of the premises. Members of the household attending school are excluded from attendance until the patient has recovered, and the house and its contents have been disinfected. On recovery of the patient, as certified by the medical practitioner in attendance, the bedding and clothing are disinfected in an Equifex Disinfector, and other articles, which cannot be subjected to steam, are exposed to the vapour of Formalin.

In cases of Enteric Fever, special tubs are provided, and removed daily free of cost.

The only diseases for which isolation accommodation is at present provided for are Plague and Small-pox; the Lazaretto is entirely reserved for the former, whilst the latter is treated in adjoining huts.

(4). Plans for public abattoirs have been prepared, and it is to be hoped that the erection of these will be proceeded with during 1906.

The condition under which slaughtering is at present carried out is very unsatisfactory, and the existing slaughter-houses are quite unfit for the purpose.

(5). Inspection of meat is systematically carried out, both in the butchers' shops and at the slaughter-houses; 3,270 lbs. of mutton, beef and pork, 1,075 lbs. of bacon and ham, and four hares were seized during the year.

(6). During the year 2,811 notices were served for the abatement of nuisances.

Fifty-seven prosecutions were instituted for offences against the Public Health Act and Municipal Regulations.

Sixteen houses were closed as unfit for habitation, and one hundred shanties and rooms in backyards were similarly dealt with.

Ten thousand four hundred and forty-eight tins and 1,343 lbs. of unsound food-stuffs were seized and condemned.

(7). The extermination of rats is dealt with by a special staff maintained by the Government.

(ii) WALMER (MUNICIPALITY).

(1). With regard to the water-supply, this Municipality is entirely dependent on rain water, which is conserved in tanks, both under and above ground. Every care is taken as far as possible to prevent contamination.

(2). Night-soil is collected on the tub system, and is removed and buried in the drift sands sufficiently far from any dwelling-houses to prevent being a danger or nuisance. Refuse is removed by the Municipality and burned.

(3). Infectious diseases show a great diminution from previous years, there only having been three cases of Enteric Fever and eight cases of Phthisis reported in the twelve months.

There is no Hospital for infectious diseases provided, except for Plague and Small-pox, which cases are removed to the Port Elizabeth Lazaretto, by arrangement with the Port Elizabeth Municipality. With regard to other infectious diseases, the usual methods of isolation and disinfection are employed.

(4). The Local Authority has not established any public abattoirs.

At present slaughtering takes place in three private slaughter-houses, which belong to butchers resident in Port Elizabeth and carrying on business there.

As I pointed out in former reports, the situation of these slaughter-houses is much too near to the residential part of the town to be satisfactory. During the year the Town Council came to an agreement with the owners for the removal of these houses, and their re-erection in a more suitable place. This new ground was, after all, not available, as Government did not see their way to allow of slaughter-houses being built on it. Under these circumstances, the old condition of affairs continues.

(5). There is no direct system of meat inspection carried out in Walmer. All the meat from the slaughter-houses goes to Port Elizabeth, and Walmer is supplied from there.

In Port Elizabeth the meat is regularly inspected by the Health Department.

(6). The most important work in this section has been the shutting up of Emslie's Location, which has been so often reported upon unfavourably.

Under order of the Court, these dwellings were declared to be unfit for human habitation, and the owner is now removing them. This will no doubt be found to be a great boon to Walmer, and in my opinion will result in a great lessening of preventable disease.

(7). Rats are not prevalent to any extent, and at present no steps are being taken for their extermination.

PRIESKA.

PRIESKA (MUNICIPALITY).

(1) and (2). As reported previously.

(3). The village has been free from any epidemic, and generally the state of health here has been good.

Syphilis I believe is still on the increase, and the remarks contained in the last report still hold good.

(4). No abattoirs have been established. The slaughtering is carried on satisfactorily.

(5). No inspection of meats is carried on, except by the Police.

(6). During the past year the Council had the Native Location, which previously was a great source of danger in spreading disease, removed further north. A Location Inspector has been appointed, and attends to overcrowding, etc. His work has been crowned with success so far.

(7). There are no rats in the village or District.

(8). The Council again wish to urge upon Government the necessity of making some provision for the isolation of Syphilitics on the lines mentioned in the last report.

PRINCE ALBERT.

PRINCE ALBERT (MUNICIPALITY).

(1). The water-supply of the village of Prince Albert is derived from springs, which have their rise in the Great Zwartberg Range, situate without the area of the Municipality. It is conveyed in open furrow, and is considered ample in so far as the domestic wants of the village are concerned, but not sufficient for the purpose of irrigation.

(2). Night-soil, household and other refuse are disposed of by removal and burial at a place specially set apart by the Council.

(3). Fifty-four cases of infectious disease have been reported since my last report. No Hospital accommodation has been provided.

(4). No public abattoirs have so far been established, nor does the Council contemplate doing so. Slaughtering is at present carried out under the supervision of the Sanitary Inspector, outside the village.

(5). No system of meat inspection is carried out.

(6). As the Government loan has only just been received, nothing has as yet been done to remedy sanitary defects.

(7). No rats exist in this village.

QUEENSTOWN.

(i) QUEENSTOWN (MUNICIPALITY).

*Report by DR. T. F. TANNAHILL, Medical Officer of Health.

(1). The water-supply, which is obtained from Bongolo basin and surrounding area, is not under the control of the Local Authority, and is without the area of the Authority. It is conveyed in pipes from the reservoir, is adequate, but liable to pollution.

(2). The disposal of night-soil, slop-water, and household refuse is by the pail system and carts.

(3). Ordinary outbreaks of Measles, Whooping Cough and Diarrhœa, occurred during the period under report. The Lazaretto and Quarantine station are used for Small-pox cases only. Cases of Enteric Fever are treated at the Frontier Hospital, only a few cases of the latter have occurred since the war.

(4). The public abattoirs are in first class sanitary condition.

(5). No system of meat inspection is in vogue.

(6). Daily inspection is carried out by a duly appointed Sanitary Inspector, and continuous supervision of all sanitation by Medical Officer of Health.

(7). Rats are numerous. Individual initiative is relied on for their destruction.

(8). A perfect water supply is in course of construction.

Syphilis is present in this area, and not well provided for.

(ii) HACKNEY (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from small streams and natural springs, all within the area of the Board. Each house draws the water from the river or springs by means of buckets.

* Forwarded by Municipality for publication.

(2). There is no special system adopted, each house has its place some distance off.

(3). In May, 1905, a case of Bubonic Plague was introduced from East London, which was fatal. Three people were infected, two cases proving fatal. Under the direction of the District Surgeon the place was quarantined. Government supplied tents and other furniture, and took over the charge of the camp. No other cases of infectious disease occurred. No Hospital accommodation is provided.

(4). There are no public slaughter places; each householder slaughtering on his own premises.

(6). There are no rats in this area. Mice are not so plentiful, and no action is taken to destroy them.

(7). No Health Officer is employed.

(iii) KAMASTONE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained mostly from natural springs and small streams which run through this large area. The water for domestic purposes is carried by each individual for his or her private use. The supply during the last eighteen months has been generally inadequate, more especially in the Sub-Location of Kamastone, where the Mission claims and diverts the flow of water.

(2). No changes have taken place in regard to the disposal of night-soil, slop-water, household and other refuse.

(3). There have been no outbreaks of any infectious disease during the last eighteen months.

(7). No steps were taken for the destruction of rats, as they were not prevalent. No Health Officer is employed by the Board.

(iv) LESSEYTON (VILLAGE MANAGEMENT BOARD).

(1). The water is obtained from a river close to the village by diversion in an open furrow, and collected in a dam, from which the water is drawn. The dam and the furrow are regularly cleaned, and the water is pure.

(2). There is no system of collection and disposal of night-soil, etc.

(3). There was no outbreak of infectious disease during the period under report.

(4). There are no butcheries, each family does its own slaughtering.

(5). No system of meat inspection is carried out.

(6). Everything possible is done to keep the area under control clean and healthy. The open water furrows are cleaned, and overcrowding is guarded against.

(7). There are no rats.

No Health Officer is employed.

(v) STERKSTROOM (MUNICIPALITY).

All matters regarding the health and sanitation of this area are dealt with in the report of the Additional District Surgeon.

The Town Clerk performs the duties of Sanitary Inspector, for which he receives no remuneration.

The Additional District Surgeon is generally appointed Medical Officer of Health when an outbreak of infectious disease needs supervision.

(vi) WHITTLESEA (VILLAGE MANAGEMENT BOARD).

(1). The water-supply for domestic use is derived from two sources: (a) By means of tanks for conserving rain water, and (b) direct from the Ox Kraal River which bounds the village, on one side; is sufficient and pure, except when swollen in the rainy seasons.

(2). The disposal of night-soil, slop-water and household and other refuse is carried out as in the past, and is satisfactory.

(3). Only one case has been reported, that of a case of modified Small-pox, which was introduced into the village. This case was attended by Dr. J. K. Murray, who then acted as Medical Officer to the Board. No Hospital accommodation has been provided, as it has not been found necessary.

(4). No public abattoirs have been established. At present butchers slaughter sheep on their own premises, the principal butcher living on a suburban allotment about half a mile away from the village.

(5). No inspection of meat is carried out.

(7). There are a good many of the older buildings in the village infested with rats. Copperas has been found effective in clearing these, but, as far as I have been able to ascertain, I am of opinion that it merely drives them away to some other place and does not exterminate.

RICHMOND.

RICHMOND (MUNICIPALITY).

(1). The water-supply is derived from two well-built springs situated in the Onger's River, which is under control of Local Authority. All water for domestic purposes is carried from these springs in open buckets.

For irrigation purposes the water is led in an open furrow from the river to the gardens.

(2). (a) The tub system is in use, the pails are emptied once a week at a good distance from the town and covered up by the contractor.

(b) and (c) Slop-water, household and other refuse are carried away on the old system.

(3). The general health of the District has been satisfactory, only nine cases of Diphtheria and six of Fever being reported during the period ended 30th June, 1904, and thirteen cases of Fever and six of Diphtheria during the twelve months ended 30th June, 1905.

(4) to (8). Nil.

RIVERSDALE.

(i) RIVERSDALE (MUNICIPALITY).

(1). The water-supply is derived from a river and is led down into a reservoir in pipes, and from there also in pipes into the streets and private properties.

The source is owned by the Municipality, but is outside the area.

The water-supply is constant and no contamination occurs in transit.

(2). (a) Night-soil is removed every alternate night, and deposited in pits some distance from the town. These pits are kept covered.

(b) and (c) Slopwater and household refuse must be removed daily by inhabitants, and deposited on a site provided by the Municipality. The refuse is burned periodically.

(3). There were a number of Typhoid Fever cases in the early part of the year, as a result of the outbreak which occurred towards the end of 1904. Apart from these there have been no cases of infectious disease. The Council has a Contagious Diseases Hospital.

(4). The slaughtering is done at public shambles, which are frequently inspected by the Sanitary Inspector.

(5). No system of meat inspection is carried out.

(6). The Standard Regulations have been enforced within the Municipality, and the Sanitary Inspector has instructions to prosecute anyone contravening same.

(7). There are no rats in the area of this Local Authority.

(ii) ALBERTINIA (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a spring, and is conveyed in open furrows; the supply is adequate and pure, and under the control of Local Authority.

(2). Night-soil is removed twice a week.

(3). No infectious diseases prevailed during 1904 and 1905.

(4). No public abattoirs have been established; slaughtering is not allowed in village.

(5). No system of meat inspection is carried out.

(6). The public are strictly warned to prevent the accumulation of filth and noxious matters, and overcrowding of dwellings.

(7). No rats prevail in the village or District.

ROBERTSON.

(i) ROBERTSON (MUNICIPALITY).

(1). The water-supply is excellent. No alteration has been made since last report.

(2). No alteration since last report.

(3). With the exception of a few isolated cases of Enteric Fever, and nine cases of Diphtheria, eight of which were confined to two households, the health of the inhabitants has been generally very good during the period under report. There is no infectious diseases Hospital.

(4). There are no public abattoirs, and the Municipality does not contemplate establishing same. Slaughtering is at present carried on by the several butchers at premises on the Municipal commonage, allotted them by the Council.

(5). No system of meat inspection is carried out by the Council, but the butchers shops are constantly inspected by the police, and by the Council's Sanitary Inspector.

(6). In order to minimise the chance of the drink water supply being contaminated above the intakes—the only places where pollution can take place—an agreement was entered into with the owners of land by which they undertook not to irrigate or cultivate certain portions of their ground, where the drainage could run into the town water-supply.

(7). There are no rats in the Municipality.

(8). The Council has not appointed a Health Officer.

(ii) LADY GREY (VILLAGE MANAGEMENT BOARD).

(1). The source of the water-supply is from a mountain. It is conveyed in an open furrow, a certain part of which is within the Board's area. The water is liable to pollution.

(2). (a) Each house has a W.C., and the night-soil is buried in the ground of the owners. (b) Slop-water is used for pigs, etc. (c) Household and other refuse are mixed with manure.

(3). A hut has been provided for the treatment of cases of infectious disease.

(4). No public abattoirs have been established.

(5). No system of meat inspection is carried out.

(6). The police guard against the pollution of the water-supply, and the accumulation of filth and noxious matters.

(7). No rats are prevalent.

SIMONSTOWN.

(i) SIMONSTOWN (MUNICIPALITY).

(1). The chief sources of water-supply to the town are from springs. One small reservoir is supplied partly by surface and partly by spring water.

The various springs by which the town is supplied with water, with the exception of one-half share from the main spring which supplies the Admiralty, are the property of the Municipality, and are situated within the Municipal area. The water is stored by means of reservoirs and tank, and is distributed by means of pipes.

The water as regards purity is satisfactory, but in view of the underground system of drainage, the supply is inadequate for a full supply during the dry season, and the Town Council are now testing the quantity and quality of water from other sources with a view of increasing the supply.

(2). Nearly the whole of the town is now drained by an efficient system of underground drainage. A scheme for draining the outlying portions of the town is being considered by the Council. These houses are now served by the pail system, the pails being removed weekly and the contents deposited into the sea outside the town.

(a) Night-soil is removed, where pails are used, by the Municipal carts and deposited in the sea.

(b) Slop-water is mostly carried away by means of the underground drains.

(c) Household refuse is collected daily by the Municipal carts and burnt outside the town.

(3). All cases of infectious disease are superintended by the Sanitary Inspector during the infective period, and the premises afterwards disinfected. There is no Infectious Diseases Hospital in the town, but the Town Council contribute towards the maintenance of the Cape Town Small-pox Hospital for the treatment of any Small-pox patients from this Municipality.

The following cases of infectious diseases were notified during the eighteen months ended the 31st December, 1905:—Typhoid Fever, 14 (2 from H.M. Ships); Phthisis, 7; Diphtheria, 1; Puerperal Fever, 1; Scarlet Fever, 2. Total, 25.

(4). The Council have had the matter of constructing public abattoirs under consideration for some time, and they are only waiting to obtain title to certain land to give serious attention to a scheme for providing efficient abattoirs for slaughtering outside the town. Only two private slaughter-houses exist in the town, but very little slaughtering, however, is done at present. The premises are kept in as clean and satisfactory a condition as is possible, having regard to the class of buildings and their position.

(5). Butchers' and bakers' shops, fruit shops, etc., are kept well under supervision by the Sanitary Inspector. Several seizures of unsound meat and fruit were made during the year.

(6). Constant supervision is kept over all tenement houses, etc., and measures taken to keep them in a proper state of sanitation and repair, well ventilated, and provided with a sufficient water-supply.

Overcrowding exists to some extent, although every effort is made to suppress the evil as much as possible.

(7). 311 rats were delivered at the Municipal Office during the year and destroyed under the supervision of the Sanitary Inspector. The amount paid for each rat is 3d. Rats are not now very prevalent in the Municipality.

(8). Dairies, cowsheds, stables and pig-styes are also well supervised, and kept in a satisfactory condition. The sale of milk is also well watched.

Sanitary defects and general nuisances are attended to by the Sanitary Inspector. All nuisances are quickly abated and sanitary defects made good as soon as possible.

The Municipality has been free from Small-pox during the eighteen months, and no cases of Leprosy have been brought to notice.

The Municipal Location is well looked after and kept clean. There are now about 240 Natives living there.

The condition of the cemeteries has considerably improved during the past few years. The Town Council intend, as soon as certain formalities in connection with a grant of land are concluded, to provide for a new cemetery to the north of the town.

(ii) KALK BAY—MUIZENBERG (MUNICIPALITY).

*Report of Dr. C. E. WOOD, Medical Officer of Health.

(1). The water is collected from moorland areas, six miles away from Muizenberg, into a reservoir. There is also a service reservoir one mile away. The water is distributed by iron pipes throughout the Municipality.

The water has a red brownish tinge similar to mountain water in other parts of the Peninsula. This is due to vegetable colouring matter; very slight traces of organic matter are present.

(2). The pail and slop system prevails throughout the Municipality. Night-soil is removed at least once a week from all occupied houses, and oftener in some cases; in the case of large boarding-houses and hotels, where it is required, the removal takes place every night.

Three hotels in Muizenberg and one in St. James have their own septic tanks, and these are in good working order.

Slop-water is removed daily, or every two days, as required, from all houses and hotels by means of slop carts. Hotels with septic tank discharge their slop-water into these tanks.

During the past year, 1905, the Main Road through Muizenberg, St. James, and Kalk Bay has been taken up in order to put down drainage pipes, as the Council is going in for a thorough system of sewage.

At Kalk Bay there has been a good deal of trouble with refuse from the Fish and Land Co.'s premises being washed back on to the beach and polluting it. This is at present engaging the attention of the Council, and will I hope soon be remedied.

During the years 1904 and 1905 the following cases of infectious disease were reported within the Municipality:—

	1905.	1904.
Scarlet Fever... ..	7	2
Enteric Fever	4	20
Tuberculosis	4	8
Small-pox... ..	2	—
Diphtheria... ..	—	2
	—	—
Total... ..	17	32
	—	—

* Forwarded by Municipality for publication.

Vital statistics:—

Births.	1905.	1904.	Deaths.	1905.	1904.
European	51	42	European	21	14
Coloured	79	62	Coloured	32	28
	—	—		—	—
Total	130	104	Total	53	42
	—	—		—	—

Deaths.	1905.	1904.
Europeans under 12 months	9	5
Europeans over 12 months... ..	12	9
Coloured people under 12 months	18	16
Coloured people over 12 months	14	12
	—	—
Total	53	42
	—	—

SOMERSET EAST.

(i) SOMERSET EAST (MUNICIPALITY).

(1). There is a reservoir 2,000 feet above the town, with a capacity of 40,000,000 gallons of water, the water flows through an open course to a waterhouse lower down the mountain, from whence it is distributed in pipes throughout the town; the water on its way down the open course is largely augmented by permanent springs. The Council are only waiting the necessary funds from Government to complete the system with pipes throughout, and thus prevent any possible cause of pollution.

(2). (a) The tub system is in vogue, and the Council undertake weekly removals. (b) and (c) No system is in vogue; depositing sites are appointed.

(3). Only a few cases of Enteric occurred, and steps were taken to trace the source of infection. A small iron building is maintained outside the town, which would accommodate a few patients if occasion required.

(4). The Local Authority has established public abattoirs. These are in good order.

(5). Meat is inspected by the Sanitary Inspector, prosecutions arising occasionally.

(7). Rats are fairly prevalent. No steps are taken by Local Authority for their destruction.

(8). No Health Officer is employed, the services of the District Surgeon being obtained when necessary. All the doctors are paid a nominal fee to report all infectious cases that come under their notice.

(ii) PEARSTON (MUNICIPALITY).

(1). The water-supply for the village is derived (a) from wells, for household purposes, and (b) from a spring, arising in the Vogel River, belonging to and under the control of the Municipality. The water from the spring is diverted from the river by a weir, and carried by open furrows into the village for irrigation purposes. The supply generally is inadequate, though at the present moment it is sufficient, and the water is considered pure.

(2). Night-soil and slop-water are collected in cesspits, and household and other refuse are deposited at sites pointed out by the Municipality.

(3). The village hitherto has been singularly free from infectious diseases. No Hospital accommodation is required.

(4). No public abattoirs have been established nor is it contemplated doing so.

(5). No system of meat inspection is carried out.

(6). A Streetkeeper and Sanitary Inspector look after the health of the town.

(7). Rats are not very numerous, and no steps are being taken to exterminate them.

STELLENBOSCH.

(i) STELLENBOSCH (MUNICIPALITY).

*Report of DR. J. H. NEETHLING, Medical Officer of Health.

(1). The water-supply is derived from the Eerste River. The source is from many springs in the Jonkershoek Mountains, and outside the area of control of the Board. The water is taken from the river at a point now included in the Municipal boundary, and about a mile and a quarter from the centre of the town. It is first brought through a filter, thence by pipes to a reservoir and again by iron main pipes and lead terminals to the various properties within the Municipality.

The quality and quantity is pure and sufficient.

There are however several farms between the source and the intake, whose natural drainage is into the river. The water is thus liable to pollution. The Board has acquired the rights of a very strong spring, above any possible danger of pollution. This water will soon be brought to the town in pipes, when the supply will be pure and adequate.

(2). (a) The night-soil removal is effected by what is known as the "double-bucket system." Some years ago it was felt that the sewage might be the cause of the frequently recurring epidemics of Typhoid Fever. It was consequently decided to do away with all cesspools, except a very few which existed under the most favourable conditions as to natural drainage, distance from neighbours, etc.,. The present night-soil removal naturally causes a certain amount of discomfort and unpleasantness, but its results have been excellent, as there has not been anything approaching an epidemic since 1898.

The night-soil is removed to and buried in a spot sufficiently far from any habitation to cause a nuisance or source of danger.

(b) The question of the disposal of slop-water is a very difficult one. At present most of it is allowed to run into the furrows along the streets. Owing to the plentiful supply of water at the disposal of the Board, and the natural slope of the streets, these furrows are frequently and efficiently flushed, so that what might under adverse circumstances become a source of great danger is an easy and safe, if not nice, way of disposal of slop and rain water. It has however long been felt that it would add to the sense of security as well as to the æsthetic taste of the inhabitants if a better way of slop disposal can be introduced. This would be the strongest argument in favour of the adoption of a drainage scheme in the future.

A great deal of attention on the part of the officers of the Board has been paid to the dryness and proper cleansing of the backyards. In consequence, the number of cases of Diphtheria and Croup has diminished to a mere nothing per annum.

(c) The household and other refuse are removed by means of scavenger carts. The service is efficient and negligence on the part of the contractors is put to rights whenever discovered. Owing to the fact that there are many slums scattered throughout the town, and that a great quantity of leaves fall from the oaks in autumn, this service is no light one.

(3). The following is a tabulated list of notifiable diseases:—

July 1st to December 31st, 1904.					
Typhoid.	Tuberculosis.	Scarlatina.	Diphtheria.		
3	4	10	5		
January 1st to December 31st, 1905.					
Typhoid.	Small-pox.	Tuberculosis.	Measles.	Scarlatina.	Diphtheria.
4	1	8	10	2	2

The majority of the Typhoid cases have not been endemic but introduced from elsewhere, so that the town has been practically free from Typhoid. There has been one case of Small-pox which was properly cared for and not allowed to spread.

Tuberculosis is on the increase amongst the coloured community. The question of combating this insidious disease is felt to be a serious and difficult one. The Board would welcome any suggestions from the Health Office upon the matter.

In November, 1905, a serious outbreak of Measles commenced. The death-rate was upwards of 12 per cent. of the cases, gastro enteric symptoms being the most serious and pronounced type. Many cases developed this tendency after the Measles had passed off and proved fatal after cure was confidently expected.

The epidemic was practically limited to the coloured community and is not yet over.

The Board has handed over its Infectious Diseases Hospital to the Victoria Memorial Hospital. The Committee of Management of the said Hospital is considering the provision for proper accommodation and treatment of infectious diseases.

There have been practically no cases of Syphilis in the town for some years. The fact that there are still annually a few cases of Diphtheria is due to the fact that flushing of the furrows cannot be thoroughly carried out in some back streets, and also that notwithstanding all care there is still too much washing going on in the backyards and throwing out of slops on the ground.

There are also several portions of the town where the soil is marshy and easily contaminated, and where, despite all care and stringency, such contamination will be persisted in.

(4). The Board has not established public abattoirs, nor has it the present intention of doing so.

Each butchery has its own slaughtering-place subject to inspection. This is regularly carried out, and so far the results have been completely satisfactory. The meat is brought in covered carts to the separate butcheries and retailed.

(5). The meat is subject to inspection at any time, also the carts and butcheries. These are rigidly inspected by the officers of the Board and at intervals by the Medical Officer of Health. There has in consequence been a great improvement in the condition of the meat trade. Several convictions have been obtained in the Magistrate's Court. Some butcheries have been closed and many improved. The Board is watching this branch of trade carefully, and intend to obtain a high standard of efficiency.

(6). The Board is steadily and as quickly as possible improving the furrows along the streets, changing the old cobbled ones for new, composed of hard bricks and cement. These are well constructed and so arranged that they can be easily and thoroughly flushed.

As much as possible the water-supply is guarded from pollution. It is however admitted that until the contemplated water scheme is carried out complete protection is impossible.

There is practically no overcrowding. The type of house hired to the coloured people is much improved from the old. Several convictions, however, especially in the case of Hindoos, have been obtained.

(7). There have been no steps taken for the destruction of rats. No dead rats have been brought to the notice of the Board during the period under consideration. Most of these rodents live in holes between the stones lining the larger water-furrows which intersect the town. These furrows are being steadily improved, and in consequence the rats are being driven gradually out of the town. The river, however, proves such a safe harbour for them that their extinction is practically impossible.

(8). As has been shown in the above report, all matters relating to the health and sanitation of this area have been receiving the careful attention of the Board for many years. The debt owed to the public of the whole country because of the many young people who come here for educational purposes is fully recognised. The intention of the Board is to render Stellenbosch both pleasant and healthy. This intention is being steadily if somewhat slowly carried out.

(ii) SOMERSET STRAND (MUNICIPALITY).

(1). The water is taken from the Lourens River above the village of Somerset West, and the source is outside our Municipal area. From the intake the water is carried in pipes to the filter bed of the reservoir, from whence it is distributed through pipes to the various houses. The supply is more than sufficient. The reservoir is fenced in with barbed wire fences, and the water is free from pollution.

(2). (a) Partly by means of water closets and partly by E.C.'s. With the latter the removals are regularly effected by a contractor, and the night-soil buried three feet deep.

(b) Slop-water is removed daily and buried with the night-soil.

(c) Household refuse is removed daily by Municipal carts, and buried on the same spot as the night-soil.

(3). The following cases of infectious disease have been notified:—

Diphtheria, 4; Amaas, 11; Erysipelas, 1; Varicella, 1; Typhoid Fever, 2.

(4). No public abattoirs have been established.

(5). No regular system of meat inspection is in vogue, but surprise visits are occasionally made, without any results being obtained.

- (6). There are no cases of overerowding.
 - (7). Very few rats are to be found in the Munieipality.
- There is no Health Officer employed by the Councel.

(iii) SOMERSET WEST (MUNICIPALITY).

(1). The present supply of water is obtained from the Lourens River, and is led into the village through open furrows.

The water in question is taken at a point well above the existing village, and is abundant and good at the intakes, but is liable to pollution in the open furrows.

Schemes to bring a supply of pure spring water in pipes from a distanee for drinking purposes have been before the Councel, but nothing has yet been definitely decided upon.

(2). (a) The night-soil is carted outside the limits of the Municipality, and buried. (b) Slop-water is allowed to run away. (c) Household and other refuse are carted away, buried and dealt with by the contractor in the same way as night-soil.

(3). Owing to the abundant supply of water flowing through the furrows the village has been kept clean and in a healthy state. Only a few cases of infectious disease have occurred.

Two cases of Amaas were notified, and were promptly taken in hand by the Munieipality, the disease being stamped out.

Hospital accommodation has not yet been provided. Correspondence passed between the Somerset Strand Municipality and this Local Authority, but so far nothing has been done with regard to the building of a Hospital.

(4). Butchers do their own slaughtering outside the limits of the Municipality.

(5). Butchers' shops and meat are inspected.

(6). Overerowding is exeptional, there being plenty of accommodation for the inhabitants.

The pollution of the furrow is closely watched, and anyone so doing is promptly prosecuted.

(7). Very few rats are about, and it has been found unneeessary to take any special steps for their destruction.

(iv) GORDON'S BAY (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is very good and plentiful. It comes direct from a mountain spring and runs down the mountain side in its natural course covered by vegetation, into filtering tanks. From the tanks the residents get their water-supply. It is distributed in pipes and is absolutely pure. The tanks and piping are under the supervision of the Board.

(2). With regard to the disposal of night-soil, slop-water and house refuse, (a) the ordinary sanitary buckets are used in w.c.'s. Every erf-holder deposits night-soil on his own premises on the most convenient spot. (b) Slop-water is disposed of in the same way. (c) House refuse is carted away from the village.

(3). No infectious disease has been prevalent. There is no Hospital accommodation.

(4). Very little slaughtering is done here, the village being mostly supplied with meat from the neighbouring towns.

(5). The butchery is kept clean and under the thorough supervision of the Board. There is no system of meat inspection.

(6). A Sanitary Inspector has been appointed by the Board whose duty is to see that all places are kept clean. No special sanitary defects have been noticed.

The health in general is good.

(7). Rats were very prevalent, but have been largely reduced. Threepence per head is paid by the Board for them.

STEYNSBURG.

STEYNSBURG (MUNICIPALITY).

(1). The town receives its water-supply from four sources (1) furrow water; (2) Boreholes and sunken wells on private property; (3) Municipal wells, and (4) Rain-water. The water used for domestic purposes is obtained from boreholes in town, and is pumped in galvanised iron pipes into tanks on the market square. There is no possible means of pollution, and the supply is controlled by the Municipality.

(2). (a) Night-soil is removed during the night as soon as the tubs are reported full, and deposited outside the town.

(b) Slop-water is removed by Municipal carts from houses twice a week, and boarding-houses and hotels daily.

(c) Refuse, ashes, etc., are also removed by Municipal carts as above indicated.

(3). The following cases of infectious disease were reported during 1905:—

One of Leprosy, one of Puerperal Fever, eight of Diphtheria, and seventeen of Enteric Fever; all the cases were promptly dealt with, and nine proved fatal. There is no Contagious Diseases Hospital here. This is urgently needed. Enteric Fever cases are provided with special sanitary pails.

(4). The slaughtering and cleansing of carcases continue to be carried on outside the town. Butcheries and bakeries are kept in a cleanly condition. There are no trades here affecting health.

(5). Meat inspection is carried out by the Sanitary Inspector, and with the exception of one case, in regard to which the necessary precautions were taken, no complaints were made during the year of the detection of unsound meat.

(6). Surprise night visits have occasionally been made, and precautions taken on discovery of overcrowding.

(7). No nuisance has been reported from rats or mice.

STEYTLERVILLE.

STEYTLERVILLE (MUNICIPALITY).

(1). The water-supply of the village is derived from wells situate on the different properties here, being the drainage of the Groot Rivier, which runs immediately into the village, the supply whereof has so far been sufficient and adequate, and is practically used for all purposes. Many residences here are also supplied with tanks, which are used principally for drinking purposes. The water derived from the wells is fairly pure and free from pollution.

(2). The system of collection and disposal of night-soil is the dry earth closet and pail system, and is done by the removal of night-soil once every fourteen days generally, and as often otherwise as may be required. Slops and other household refuse are removed to the depositing ground appointed for that purpose.

(3). Very few infectious diseases prevailed here during the past year, which did not necessitate an Infectious Diseases Hospital. There was a Contagious Diseases Hospital here until last year, when it was abolished by Government.

(4). No public slaughtering place have been established, but butchers are only allowed to kill outside of the village at such spots pointed out to them by the Municipality.

(5). No meat inspection is carried out; the place being small, and not much slaughtering takes place.

(6). It has not been found necessary to remedy any sanitary defects. The village is kept very clean.

(7). No rats exist here.

STOCKENSTROOM.

(i) BALFOUR (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from the Balfour River, the source of which is several springs on the Katberg Mountains, about twelve miles distant, which is not under the control of this Authority. It is conveyed to the erven by open furrows, and is liable to pollution. The supply has been adequate for the last twelve months, and now, in view of the Government Forest Officer re-planting certain portions of the mountain, we expect in a few years hence to have a very plentiful supply.

(2). There is no regular system for the disposal of night-soil. Refuse and all filthy matter are collected in heaps and then burnt.

(3). No report has been made to the Board during the past twelve months of any case of contagious or infectious disease.

(4). The butchers kill the stock on their own premises.

(5). No system of meat inspection is carried out.

(6). The Board enforces cleanliness as far as possible, and there is, as far as is known, no overcrowding of dwellings.

(7). Rats are prevalent, but not to a very great extent. Farmers and store-keepers use every means in their power for their extermination. The large rat-trap does good work, and as many as thirteen have been seen in one trap, caught in one night.

(ii) BELLVALE (VILLAGE MANAGEMENT BOARD).

No report furnished.

(iii) BERGMAN'S HOEK (VILLAGE MANAGEMENT BOARD).

No report furnished.

(iv) BUXTON (VILLAGE MANAGEMENT BOARD).

(1). **The** water-supply is conveyed by open furrow. Owing to rains there has been a good supply.

(2). This being a long scattered village there is no regular system of disposal of night-soil.

(3). No infectious diseases have occurred.

(4) and (5). Nil.

(7). No rats have been found in the village.

(8). No Health Officer is employed here.

(v) CATHCART VALE (VILLAGE MANAGEMENT BOARD).

Cathcart Vale Location is not a town or village, but consists of a number of scattered farm houses. No system of sanitation is consequently necessary.

There have been no cases of infectious disease during the period under report. The remarks contained in the last report still apply in every respect.

(vi) DAVID SCHEEPERS (VILLAGE MANAGEMENT BOARD).

All records relating to matters in this area are kept at the Resident Magistrate's Office in Seymour, where such reports are only registered.

Only three white families are living in David Scheepers and a few coloured labourers of our own. I beg to state from memory that only one death occurred towards the latter end of 1905, a coloured child (female).

(vii) EBENEZER EAST (VILLAGE MANAGEMENT BOARD).

No report furnished.

(viii) ELANDS RIVER (VILLAGE MANAGEMENT BOARD).

No report furnished.

(ix) EYRE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is fairly good, and is fed by springs. It is not under the control of the Board, as it rises on a private farm in the mountains, and beyond the Board's area. The water is collected by damming the river, and is distributed by open furrow. At present the supply is adequate and pure, but fails in heavy drought.

(2). Night-soil, slop-water, and household and other refuse are strewn on the lands.

(3). No infectious disease has occurred.

(4). No public abattoirs have been established, nor does the Board contemplate doing so, as slaughtering is only carried on for private purposes.

(5). No system of meat inspection has been carried out.

(6). No action has been taken to remedy sanitary defects, as this is not deemed necessary. Overcrowding does not exist in this area.

(7). Cats are used for the extermination of rats, and have proved very satisfactory.

(x) HERTZOG (VILLAGE MANAGEMENT BOARD).

No report furnished.

(xi) LUSHINGTON (VILLAGE MANAGEMENT BOARD).

- (1) and (2). As in last report.
- (3). No infectious disease prevailed.
- (4). Every erf-holder kills privately on his premises.
- (5). No system of meat inspection is carried out.
- (6). Any defects were seen to by the Board.
- (7). Rats are very troublesome. No steps are taken for their extermination.

(xii) MAASDORP (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from two mountain torrents, which are under the control of the Local Authority. The water is distributed in open furrows which, however, for the most part pass through the erven. These, being fenced in, prevent pollution by cattle, etc.

(2). The inhabitants of the location being mostly Natives, the sanitary system is quite primitive, the details of which are hardly necessary.

(3). No outbreak of infectious disease has been brought to my notice.

(4), (5), (6), and (7). Nil.

(xiii) MANCAZANA (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from the river and tanks, in which rain water is stored.

(3). This area is free from any infectious diseases.

(5). All the farmers do their own slaughtering.

(6). The dwellings in this area are large, ventilated, and far apart from each other.

(7). No rats exist in this area.

(xiv) MENZIES (VILLAGE MANAGEMENT BOARD).

No report furnished.

(xv) PHILIPTON (VILLAGE MANAGEMENT BOARD).

There is nothing fresh to report since the last report was furnished.

(xvi) READSDALE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is good, and is obtained from springs in the mountains.

(2). Night-soil is carried into the lands.

(3). No infectious disease prevailed.

(4). No public abattoirs have been established. Each erfholder slaughters his own stock.

(5). No system of meat inspection is carried out.

(6). There have been no sanitary defects.

(7). No rats exist in this area.

(8). The health has been generally good during the year.

(xvii) SEYMOUR (MUNICIPALITY).

The conditions reported in my former statements regarding the sanitary and health arrangements in this Municipality are unchanged.

There have been no cases of infectious disease during the past year.

(xviii) UPPER BLINKWATER (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from the river and conveyed by open furrow. The water is good.

(2). No sanitary system is in vogue, the dwelling-houses being far apart,

(3). The health of this Local Authority is very satisfactory, no sickness having occurred.

(4). There are no slaughter-houses in this area.

(6). Strict order is given not to pollute water.

(7). No rats exist in this area.

(8). No Health Officer has been appointed.

No overcrowding takes place, and the Board enforces its regulations strictly.

(xix) UPSHER (VILLAGE MANAGEMENT BOARD).

No report furnished.

(xx) WELLSDALE (VILLAGE MANAGEMENT BOARD)

(1). For domestic purposes tank water is used. The Natives use water, which is stored in dams, into which springs flow daily. The water is quite pure and not subject to any pollution.

(2). All night-soil is buried, and slop-water is carefully drained off.

(3). No infectious diseases occurred during the year 1905.

(4). No public abattoirs have been established. Slaughtering for the household is all that is carried on.

(5). There have been no sanitary defects or overcrowded dwellings.

(6). Rats are not numerous at present. Cats have been used to destroy them.

STUTTERHEIM.

(i) STUTTERHEIM (MUNICIPALITY).

The report of the District Surgeon of Stutterheim, who is also Medical Officer of Health to the Municipality, will be found on page 134.

(ii) EMGWALI (VILLAGE MANAGEMENT BOARD).

The health and sanitation of Emgwali remain unchanged, and the remarks contained in the report for 1903 still apply.

SUTHERLAND.

SUTHERLAND (MUNICIPALITY).

*Report of DR. R. H. H. HAYDEN, Medical Officer of Health.

(1). Water for domestic purposes is derived from the following sources:—

(a) Deep wells made by boring holes through the bed-rock at varying distances up to one hundred feet. (b) Water brought from a surface spring in the neighbouring hills in an iron pipe. (c) Rain water collected in tanks from roofs. (d) A surface spring near the location, whence the inhabitants of the location get their water supply. All these sources, except (c), are within the limits of the Local Authority.

The supply is adequate and the water pure at sources, but (a) is liable to pollution from dust and drainage in the surface pits above the boreholes, where it collects. (b) Is the purest, as it is not liable to contamination, except perhaps to a very limited extent. (c) Is liable to contamination from dust on roofs and in gutterings. (d) Is liable to contamination from scooping out water with buckets and other utensils.

(2). Night-soil is removed by Natives employed privately by householders. These Natives are remunerated by the Council should they happen to know of and report any householder whose privy is not kept clean. On receiving such information the Council communicates with the delinquent, who usually complies with its requests. To establish special privy accommodation for every tenement is a difficult matter, as these people who inhabit one or two rooms are so poor that they cannot pay to have such a privy cleaned regularly, and the rents they pay would not cover the expense

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of the landlord having such privy cleaned. There are marks in the veld where such persons have to go beyond before relieving themselves, and to this regulation most comply, with a few delinquents, who use some yards or stables at night.

Slop-water is thrown for the most part in yards.

Household refuse is collected in heaps and sacks, and removed by private labour from time to time.

(3). There has been during the two years 1904-1905 in the village and location combined sixteen cases of Diphtheria and sixteen cases of Enteric Fever; also one case of Puerperal Fever occurred.

Some of the Diphtheria cases in Natives have been isolated in an old structure which was formerly used as a Contagious Diseases Hospital: others, who were not so isolated, were informed by the Medical Officer of Health of the serious nature of the disease, and warned what to do to prevent the spread of the disease. This instruction was also given to those who had Enteric in their houses.

There is no isolation hospital, but the old Contagious Diseases Hospital is now sometimes used for that purpose, as it stands on Municipal ground.

(4). Slaughtering is done in the open veld about three-quarters of a mile from the village.

(5). No system of meat inspection exists.

(6). None.

(7). Rats are practically unknown here.

(8). It is impossible to prevent the excreta of Enteric patients being thrown in yards, etc., as persons will not listen to warnings, and have same taken away. Therefore Enteric is to be found year after year in certain quarters of the village. I do not consider it comes so much from pollution of water as from dust in which such excreta has dried up.

SWELLENDAM.

(i) SWELLENDAM (MUNICIPALITY).

(1). The supply of water for the town is obtained from springs in the mountain, and there are six furrows which feed four dams, the total length of furrows being about eighteen miles. There is a four-inch pipe through Newton and down Main Street for the supply of drinking water, this pipe being three and a half miles in length. The furrows are open, and are flushed and cleaned from time to time.

(2). There is a sanitary removal by wagon twice a week. This, however, is optional, the usual practice being to have the night-soil buried in the gardens. The slop-water, household and other refuse, when not thrown on the depositing sites, are also disposed of in private grounds.

(3). There were five cases of infectious diseases reported at this office during the period, viz.:—One each of Scarlet Fever and Diphtheria and three of Typhoid Fever.

We have no hospital accommodation for cases of infectious diseases, but have tents, with beds, bedding, and all necessary articles, should occasion arise.

(4). There are no public abattoirs, the slaughtering being done on the premises of the butchers.

(5). There is no system of meat inspection carried out.

(6). The premises and yards of the inhabitants are inspected from time to time, and in cases of overcrowding or anything unhealthy or dangerous being discovered, steps are taken to put a stop to or remedy same.

(7). There are no rats within the Municipality. We have the large field mouse, which sometimes much resembles the rat, but is somewhat smaller.

(8). There is no Medical Officer of Health appointed for the Municipality.

(ii) BARRYDALE (VILLAGE MANAGEMENT BOARD).

The health of the village during the period under report was very good, and no cases of infectious disease were reported. The sanitary arrangements are still in a primitive state. Most of the dwellings, however, have w.c.'s.

The water-supply is still in the same condition as mentioned in former reports, viz.:—The water is carried by open furrows from the spring to the village. The furrows are kept in a fairly good state, and the supply of water is adequate for the requirements of the inhabitants of this area. During the last drought, however, it was rather weak. Several residents have tanks for collecting rain water.

(iii) HEIDELBERG (MUNICIPALITY).

(1). The water-supply of this village is obtained by means of the construction of a dam across the Duivenhoks River, about a mile and a half up its course, within the Municipal limits and under its direct control, and is from there conveyed by means of an open furrow to the village, where also it is distributed under the supervision of a "Waterfiscal" on the open furrow system. During the commencement of the year 1904, owing to the washaway of the dam, there was no water-supply, and the inhabitants had to pail water from the river, which passes almost on the verge of the erven, and it was not long after that cases of Enteric were reported, and the necessary precautions had to be taken. After the water-supply had been augmented in November, 1904, the Enteric gradually disappeared.

There was hardly a water-supply during the commencement of the year 1904, owing to the washaway of the dam, and on account of the want of funds it was only reinstated during the latter part of the year, since when it was generally improved upon at great cost, and has since attained its permanency to fairly supply the requirement of the village, except during the summer months, when it was very weak.

The water is pure and palatable, but subject to pollution, which cannot be controlled owing to the open furrow system and on account of the long distance it has to traverse right through the village in being distributed.

(2). Night-soil is still privately removed by the householders, and conveyed beyond the limits of the Municipality, and there buried, while some bury it on their premises and in the gardens. Removal by the Council is being anticipated under the new regulations now being framed.

Slop-water is in most cases thrown out on the middens, while in some cases it is carried in receptacles and emptied at a spot pointed out by the Council for that purpose.

Household and other refuse are carted and deposited beyond the limits of the Municipality, also at a spot set apart for that purpose.

(3). There were some cases of Enteric Fever during the years under report, the first of which was contracted at Riversdale and brought here. Owing to the defect of the water-system at the time, which was irregular and scarce, the lower part of the town's inhabitants through carelessness pailed their water from the river, below the washing place, resulting in the occurrence of further cases. The Councillors at once took steps to remove the washing place beyond the limits, where water would be pailed, and gave the local medicos every assistance to suppress the disease, which died out sooner than anticipated, and since then no further reports were made. No hospital accommodation is provided here.

(4). The Council has not established any public abattoirs, nor does it contemplate doing so, for there is no urgent necessity for such at the present time on account of the smallness of the village. The slaughtering is carried out in a very clean manner, and there remains nothing to complain of at present. The butcheries are casually visited, and the Council is satisfied with the way they are carried on.

(6). The sanitation is not carried out as in the up-to-date places, but, on the whole, the village is fairly clean, and there is very little to report as regards insantiation.

(7). Rats are not prevalent in this locality to such an extent that they have become a pest, nor was there any necessity for the Council to take extra measures for their extermination.

(iv) ZUURBRAAK (VILLAGE MANAGEMENT BOARD).

There are no alterations to report since the last report was furnished.

(1). The water is obtained from the Langeberg Mountains, is led into the village by pipes and distributed by means of open furrows.

(2). Each occupier is personally responsible for all refuse, night-soil and slop-water on his or her premises.

(3). We have no Hospital accommodation. A few cases of Typhoid Fever were reported during the year 1905.

(7). There have been no rats in the village.

(8). No Health Officer is employed.

TARKASTAD.

TARKASTAD (MUNICIPALITY).

*Report of Dr. WM. FERGUS, Medical Officer of Health.

(1). The water-supply is the same as described in previous reports, with this important difference that the amount supplied is diminishing every year. The water is of good quality and is delivered by pipes at the upper end of the village.

(2). Night-soil is disposed of by being carried to pits, situated at a considerable distance from town. When the pit or trenches are nearly full, they are filled in with fresh soil. The arrangement is under Municipal control.

Slop-water is mostly carried and thrown in the dongas near the town; its disposal is not under Municipal control.

(3). There were no serious outbreaks of infectious disease during the period under consideration, with the exception of epidemics of Diarrhœa and Measles during the latter half of 1904, affecting chiefly the Native Location. One or two isolated cases of Enteric and Diphtheria occurred, but there was no epidemic of these diseases. No special measures were taken for coping with preventable disease.

(8). The period under consideration was marked by no special features. The public health was satisfactory. The sanitary condition of the town was practically on the same level as that of the previous year. The most serious feature in the outlook for the future is the gradual but steady diminution of the water-supply, due to the absence of long-continued soaking rains, the rains experienced during the last few years being more of the nature of thunder-storms and rapid down-pours, which seem to have little influence on the underground supplies. The Municipal Authorities are fully alive to the necessity of measures being taken to increase the water-supply, and a large dam has been constructed to conserve the surface water, and two eight-inch bore-holes have been put down with satisfactory results, and at the end of 1905 plans for distributing the supply from the bore-holes throughout the town were under consideration.

TEMBULAND.

(i) UMTATA (MUNICIPALITY).

(1). There has been no actual change since last report. The Council negotiated for a water scheme from the Umtata River, but the scheme was not considered satisfactory, and so abandoned.

The Council are now adopting a scheme, proposed by Mr. E. Burrows of the Public Works Department, who made a flying survey. The result was satisfactory, but the item of cost was then (1899) considered prohibitive.

Now tenders are being called for a detailed survey of this scheme, which is known as the Kambi Forest Scheme, the cost of which is estimated at considerably less than the Umtata River Scheme, whilst the supply of water is pure and uncontaminated.

(2). Night-soil is removed by contract at 9d. per regulation bucket, the same being conveyed to the sanitary pits about a mile out of town, where it is emptied into trenches, which are filled in every seven days. Slops are emptied at appointed places, the householders being responsible for removal.

The Sanitary Contractor has a tariff for removal of rubbish, dead animals, etc. Rubbish is thrown into holes and covered up regularly, while all dead animals are buried four feet deep.

(3). Only two cases each of Small-pox, Scarlet Fever and Enteric Fever were reported during the eighteen months under report. These were either removed to the Hospital or thoroughly isolated and quarantined by the Council. No Infectious Diseases Hospital accommodation was provided by the Municipal Council.

(4). Only one slaughter-house (private property) is in use here. This is regularly inspected by our Sanitary Inspector.

(5). No system of meat inspection is carried on by the Council, any suspicious case usually being referred to a Doctor for report.

(6). The Municipal Sanitary Inspector goes round the town inspecting all yards, w.c.'s, butchers' shops, and the river banks. Numerous latrines have been provided on the outskirts of the town for Natives, and these are emptied twice per week. The Sanitary Inspector is authorised to deal with any matter requiring his attention.

(7). There are always rats in town, owing to the large quantity of grain always obtainable by them, but these have never menaced the public health, nor been considered by the Council.

(8). The town, generally, is in a very healthy condition, and for its population of 2,000 people, half being Natives, there is remarkably little sickness, beyond Influenza, which is prevalent at times. The Council do not consider it necessary to appoint a Health Officer as things are at present.

(ii) CALA (MUNICIPALITY).

(1). The water-supply is obtained from a natural spring, at present under control of the Municipality. It is distributed by means of piping, the supply being ample for domestic purposes at any season of the year. Surplus water is run through furrows and used for irrigation. The water is of excellent quality.

(2). (a) Night-soil.—The pail system is in vogue, and removal is by contract.

(b) No special provision is made for removal of slop-water.

(c) Refuse is carted away to an appointed place at the householder's expense.

(3). Six cases of Scarlatina, one of Diphtheria, and five of Typhoid have been reported during the period under notice; the cases were all dealt with at the residence of the patients.

(4). No public abattoirs are provided, but a special place is appointed for slaughtering.

(5). Meat inspection falls under the duties of the Town Overseer.

(6). The Overseer's duties comprise the inspection of dwellings, stables, etc. Offenders can be prosecuted under Municipal Bye-laws.

(7). Rats are unknown here.

TRANSKET.

BUTTERWORTH (MUNICIPALITY).

*Report of Dr. A. P. R. FENNELL, Medical Officer of Health.

The following is the information I am able to furnish in regard to the health and sanitation of the Municipality of Butterworth. It dates from the day of my appointment to the office of Medical Officer of Health to the Municipality of Butterworth viz.:—September 15th, to December 31st, 1905.

(1). The water-supply is adequate, being derived from the Butterworth River and from rain-water, which is stored in tanks. The river water is under control and within the area of the Municipality. Water from the river is carried by pails, hand barrels and water carts. Also, the river water is pumped through pipes into galvanised tanks by means of windmills.

Rain-water is stored in iron and galvanised tanks.

Both sources of water-supply are pure.

(2). Night-soil is collected by a contractor in an iron van, which has a moveable lid. The night-soil is then carried and deposited over a mile from the village.

Slop-water, household, and other refuse are collected in pails, and are deposited at the refuse heap, which lies some distance outside the village. The Municipality are contemplating having this refuse heap removed to the site at which the night-soil is at present deposited.

(3). Mumps is the only infectious disease that has prevailed, each case being strictly isolated in house of parent or guardian, there being no Hospital accommodation.

(4). There are two public abattoirs. There are no slaughter-houses, slaughtering being carried out in the open air.

(5). No system of meat inspection is carried out. Most of the meat supply is exposed for sale on the Public Market, and this has been killed the night before

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the sale. The family butchers deliver their meat in the early morning, which has been killed the evening before. These butchers just kill enough to meet the orders of their customers, with the result that no unsound meat has been reported.

(6). Everything has been done to remedy the pollution of water, the accumulation of filth and noxious matters, overcrowding and habitation of any dwellings that are unhealthy or dangerous to life, and generally to prevent or limit the occurrence of preventable disease.

(7). Rats are not so prevalent as they used to be. Trapping and poisoning are the steps taken with success for their extermination.

(8). Since the formation of the Municipality, matters relating to the health and sanitation of Butterworth have greatly improved.

TULBAGH.

(i) TULBAGH (MUNICIPALITY).

(1). The township of Tulbagh is supplied with water from the Witzenberg. Portion of this stream traverses per open furrow from its source through the town of Tulbagh, and is used exclusively for irrigation purposes, and is quite sufficient for that object.

The other portion is conveyed from an intake tank to the reservoir in the township, a distance of three miles, by a two-inch cast-iron pipe. From the reservoir the inhabitants are supplied with excellent water for drinking and domestic purposes. The discharge into the reservoir is still fairly good, but the Municipality intend laying larger pipes, and application has already been made to the Government for a loan for that purpose.

(2). The Municipality remove house refuse and also night-soil by proper conveyance at least once per week from every residence, and dispose of these in a proper manner.

Slop-water is not collected.

(3). No infectious diseases have prevailed during the last half-year.

(6). No overcrowding of dwellings or pollution of water takes place in the Municipality. Very few sanitary defects exist, and these are dealt with suitably.

(7). Rats are not prevalent.

(8). No Health Officer is employed permanently. The District Surgeon acts as such when necessary.

(ii) WOLSELEY (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from the Breede River, near the entrance to the Mitchell's Pass, from which it is brought in an open furrow. The source is situated on the farm of Waverley, and is not under the Board's control. The supply is sufficient for household purposes, though not always for irrigation purposes. The water is liable to pollution in the area outside the Board's jurisdiction. The water is distributed throughout the village in open furrows.

(2). No regular system for the removal of night-soil is in operation, but No. 8 Regulation of the Board prohibits any person placing any night-soil, rubbish, or filth in any public place or street, and fixes a proper place where such rubbish, etc., are to be deposited.

(3). With the exception of a few cases of Consumption, no infectious diseases have been reported during the period under review. The cases of Phthisis have been left in the hands of the local doctor. No Infectious Diseases Hospital accommodation has been provided.

(4). No public abattoirs have been established, and there has been as yet no call for such. The slaughtering of cattle has been done on the butchers' own premises.

(5). No system of meat inspection has been carried out.

(6). The matters in this clause receive the attention of the Streetkeeper, and the Board do their utmost to remove all causes of the pollution of the water and the committing of nuisances.

(7). Rats are not prevalent in the area under the Board's jurisdiction, but have been found on the Railway premises.

(8). No Health Officer has been appointed by the Board.

UITENHAGE.

UITENHAGE (MUNICIPALITY).

(1). The supply is as described in previous reports.

(2). The system of removing the night-soil, described in previous reports, remained in force during the year. A compulsory weekly removal of sanitary utensils prevails over the whole town, with the exception of the area known as the "Graaff-Reinet Road Lauds," where the houses are situated widely apart from each other. There is no organized system for the removal of slop-water and household and yard rubbish.

(3). During the year thirty-three cases of Enteric (Europeans 28, and Natives 5) and twelve cases of Diphtheria were reported at the Town Office. Of the Enteric cases, one case was subsequently pronounced not to be Enteric Fever. Whenever cases of the above nature are reported the Sanitary Inspector makes an inspection of the residence, and institutes other inquiries for the purpose of ascertaining whether the disease may be attributed to any defects of sanitation. Steps are also taken at the proper time to disinfect the apartments and the bedding used by the patient.

No Infectious Diseases Hospital has been provided locally. A number of patients are now treated at the Cottage Hospital.

(4). The Local Authority has not yet established public abattoirs. At present each butcher hires a separate stand on the town commonage, where he has to provide a slaughter-house, with adjuncts, in accordance with the "Model" Health Regulations.

(5). The Sanitary Inspector makes periodical inspections of all butcher and baker shops, and of all slaughter-houses, with the object of keeping things up to the required standard. He also pays surprise visits to these places. On one occasion during 1905, at an auction sale, the Inspector condemned several articles as unfit for human food.

(6). The Inspector keeps up a constant routine of inspection of premises and yards, and thus in many cases detects the existence of filth and noxious matter, rubbish, etc., which he causes to be forthwith removed. In very bad cases prosecution ensues. These inspections also serve as a deterrent, and consequently many of the inhabitants have their household and yard rubbish removed once a week.

Overcrowding is also dealt with by the Sanitary Inspector and the Health Committee of the Council. This Committee sits frequently, and issues to the Inspector instructions on all important matters brought to its notice.

(7). There are a few rats in this Municipality compared with other towns of a similar size and population. A large number of rodents were destroyed during the plague scare.

(8). The public in 1904 sanctioned a loan for the purpose of carrying out a water-borne sewerage system; and since then steps have been taken to give effect to the wishes of the public. A survey of the town has been made, and plans are in course of preparation which will be submitted in due course for the approval of the Public Works Department or a Sanitary Engineer of recognised standing in the Colony or in England.

(9). The Acting District Surgeon is Medical Officer of Health to the Municipality, but he draws no salary. He simply draws fees for professional services rendered as occasion requires.

UNIONDALE.

(i) UNIONDALE (MUNICIPALITY).

No report furnished.

(ii) HAARLEM (VILLAGE MANAGEMENT BOARD).

(1). The supply of water is good and sufficient, especially in rainy seasons, and is conveyed in open furrows to the village from the river, which has its source from mountain springs. It is under the control of the Local Authority.

(2). The system of collection and disposal of night-soil, etc., exists as hitherto.

(3). No cases of infectious diseases have occurred. Several cases of Consumption occurred during the period under report, and this is the only disease prevailing from time to time.

(4). No public abattoirs have been established. Only a small amount of slaughtering is carried out.

(5). No inspection of meat is carried out.

(6). All carcases are conveyed from the village and buried. Filth and noxious matters are buried in gardens. No pollution of any kind is allowed in or above the main watercourse, which is cleansed twice a year, or as many times as is required. No overcrowding of dwellings is tolerated. The dwellings are in general kept clean by white-washing.

(7). Rats are not prevalent in this Local Authority. No steps have been taken for their extermination.

(8). No Health Officer is employed.

VICTORIA EAST.

ALICE (MUNICIPALITY).

(1). The water-supply is obtained from the Chumie River, and is conveyed by open furrow. The supply is good and sufficient, both for irrigation and domestic purposes.

(2). Scavenging work is done by contract, and proper pits are dug out of town for depositing same. All household and other refuse are removed by contract and deposited in places appointed for same.

(6). Every precaution is taken by the Sanitary Inspector and Water Fiscal to see that the furrows are kept clean.

VICTORIA WEST.

(i) VICTORIA WEST (MUNICIPALITY).

*Report of Dr. T. E. JONES, Medical Officer of Health.

(1). The water-supply of the Municipality of Victoria West remains as previously reported. The dry years of 1904 and 1905 saw the very serious diminution of the supply, at times from the usual 60,000 or 70,000 gallons per diem to 6,000 gallons or less, and often the stream on its weekly run of supply to the inhabitants of the lower portion of the town barely reached three-fourths of the way. I have strongly maintained that the Municipality should make provision for the requirements of the ratepayers, particularly in the lower portion, where a few years back a substantial sum of money was drawn from the sale of erven. The owners of the water-erven who mostly reside in the upper portion of the town, influential and mostly well-to-do, seem satisfied with the present arrangement. A great deal of money has been spent, and most of it fruitlessly, though intended to benefit their interests, whilst the poor holders of dry erven, mostly resident in the lower portion of the town, and contributing heavily to the rates—I think much more than their share—get practically no consideration in the matter of water-supply. I say none, for the water they get once a week is unfit to drink.

(2). Night-soil is removed efficiently and regularly as previously reported.

Household and other refuse are removed by the contractors, and the work is, I think, satisfactorily done.

Slop-water is removed by a tank wagon at regular stated intervals.

(3). Scarletina, 1904, January to June.—Fourteen cases were reported, occurring mostly in May and June, during which time Mumps and Whooping Cough were also epidemic. The schools were closed two weeks earlier than the usual June holidays. During the latter half of the year one case only was notified. During 1905, thirty-eight cases were notified. As the cases were very mild in character, it was a most difficult matter to induce parents to isolate the children affected, who, in the majority of cases, complained of little beyond a slight sore throat and malaise for a few days.

I know that many cases were of so trivial a nature that they were not brought to the notice of a Medical Officer at all. I accidentally saw such cases whilst shed-

ding their slight branny scabs without realising that they had suffered from Scarlatina.

Diphtheria.—1904: First half-year, one case; second half-year, none.

1905: Four cases; in each case the usual precautions were taken.

Enteric.—1904: January to June, nine cases; July to December, thirteen cases.

1905: January to December, four cases.

(4). The Local Authority has established no public abattoir, and, as far as I know, have no intention of doing so. I have pressed the desirability of erecting one, as slaughtering, as at present conducted, is most objectionable, under conditions making it impossible to have any approach to cleanliness—such as mud floors, no flushing water and no drainage.

(5). No regular system of meat inspection has hitherto been carried out.

(6). The water furrow is cleaned weekly, but from the way the water has to find its way to different parts of the village, it is subject to pollution along most of its course.

The streets are kept very clean, and accumulations of refuse, filth and noxious matters are very promptly removed. No overcrowding of dwellings has been brought to notice, and no habitation unhealthy or dangerous to life.

(7). Rats are not prevalent in Victoria West.

(8). The Isolation Hospital is no longer fit to be used for the purpose of treating infectious diseases, owing to the growth and extension of the town, and the proximity of inhabited dwellings to it. It is highly desirable and necessary that some other provision should be made.

(ii) VOSBURG (MUNICIPALITY).

*Report of Dr. G. B. STONEY, Medical Officer of Health.

(1). The water-supply is good, and comes from a spring and borehole about 400 yards south-west of the village. This is under the control of the Municipality, and is within the Municipal area. The water is collected in a dam just outside the village, and distributed by means of open furrows. The supply is fairly adequate. The water is pure at its source, but is liable to contamination while in the dam and furrows.

(2). (a) On payment, night-soil is collected by the Municipal Authority's cart, and deposited below and outside the village.

(b) There is no provision made for slop-water.

(c) Refuse is removed by Municipal Scotch cart at a small fee.

(3). During 1905 there was one case of Scarlatina.

There was an outbreak of Diphtheria, consisting of four cases, which all ended fatally. The high mortality may be accounted for by the fact that there was no medical man in Vosburg at the time, and the District Surgeon had to be obtained from Victoria West.

There were seven cases of Small-pox, six being Europeans and one Native. Everyone in the Village was vaccinated, and many from the surrounding farms. The cases were all mild, and no deaths resulted.

Isolation and quarantine were used in all cases of infectious diseases.

There is no Infectious Diseases Hospital.

(4). There are no public abattoirs, and the Municipality do not contemplate establishing any at present. There is only one butcher in the village, and slaughtering is carried out in his yard, all sanitary precautions being used.

(5). There is no systematic inspection of meat carried out, as no complaints have ever been raised.

(6). No action has been taken during the year 1905 as regards overcrowding of dwellings, and the village is kept in a sanitary state. Houses are always disinfected after any infectious or contagious disease has been in them.

(7). Rats are scarce, and no steps are taken for their extermination. Cats are kept in most houses, and are quite sufficient to prevent the rats increasing.

(8). In my opinion, it should be made compulsory to have all night-soil removed by the Municipal Authority.

VRYBURG (MUNICIPALITY).

(1). The Municipal Council have the control of all waters.

At the south-west part of the town there is a strong fountain which supplies water for drinking purposes, and water is delivered by means of a water cart chargeable at

* Forwarded by Municipality for publication.

so much per load. The surplus water is conserved in a dam, and runs from there in an open furrow, supplying a certain number of the inhabitants on the south side with water for irrigation. On the north side of the town, and about three miles out on the commonage, is a dam fed by springs. This water is conveyed for a distance of about two miles in four-inch pipes, and then by open furrow the rest of the way into town. This source supplies a certain number of erf-holders with water for irrigation, but is inadequate for the whole so far as irrigation is concerned.

In addition to these two sources, there are a number of wells in town, used both for drinking and irrigation purposes.

(2). The disposal of night-soil is carried out by contract, and for a number of years the work has been carried out in a satisfactory manner.

There is no systematic way of dealing with slops.

Private carts dispose of household and other refuse, though there should be some compulsory system.

(3). The town has been free from Diphtheria and other infectious diseases for some months past. There is no Infectious Diseases Hospital, although a site has been pointed out in event of the necessity of erecting one at any time.

(4). Sites for slaughtering are situated at the extreme end of the town, and are inspected regularly by the Inspector, who reports everything in order.

(5). No system of meat inspection is carried out.

(6). A large number of Natives and Cape families live in town, especially at the back of Indian Coolie stores. Occasional raids have been made, but the Inspector reports no overcrowding.

(7). There are no rats beyond Kimberley—at any rate there are none at Vryburg.

WILLOWMORE.

WILLOWMORE (MUNICIPALITY).

There are no alterations to report since the last report was furnished.

WODEHOUSE.

(i) DORDRECHT (MUNICIPALITY).

(1). The water-supply of the town is derived as follows:—(a) From a reservoir of the capacity of 23,000,000 gallons, the water being conveyed into the town through pipes and distributed by means of stand-pipes and taps for household and general purposes. The reservoir, owing to frequent rains, has lately been of great service to the town, although the water therefrom cannot be used for drinking purposes.

(b) Springs.—This water is used for drinking purposes, is pure and not liable to pollution, and is distributed in the same manner as from the reservoir.

The reservoir and springs belong to and are under the control of the Municipality, and are situated within the Municipal area.

The Municipality has also sunk two bore-holes, which are now capable of giving a supply of water, but, owing to the supply from other sources being at present sufficient, the supply from the bore-holes has not yet been utilised.

(2). Night-soil and household refuse are removed once every week, and slops daily, by contract. The bucket system for night-soil is in force, and the Sanitary Inspector does his work to the satisfaction of the Council.

(3). The following cases of infectious disease occurred during the year, viz.:—Enteric (Typhoid) Fever, 19; Scarlet Fever, 5; Diphtheria, 4; Measles, 3.

Particular attention is paid to the cleansing of the town, and everything possible is done to stamp out Typhoid Fever.

No Infectious Diseases Hospital is required. A small wood and iron building, however, is kept as a Small-pox Lazaretto.

(4). Abattoirs have not been established, and slaughtering is carried out at a place set apart for that purpose, and is under the supervision of the Sanitary Inspector.

(5). The Sanitary Inspector examines all meat exposed for sale on the Municipal Market. No diseased meat has been discovered exposed for sale.

(6). There has been no accumulation of filth or other noxious matters, nor overcrowding of dwellings. The Council had occasion during the year to call upon several owners to have their properties put into better repair, and this order was promptly carried out.

(7). Rats are not unduly prevalent, and no steps are necessary for their extermination.

(ii) INDWE (MUNICIPALITY).

(1). The water-supply of this town is far from adequate, its source being the Indwe River, from which place it is pumped through iron pipes into the town, after traversing a distance of some two miles; it is received into a reservoir, situated close to the Green Mine, and just above the Native Location, and therefore subject to drainage from the high ground round it. The pumping station is outside the Municipal area, and is the property of the Indwe Coal Mining Company. From this reservoir the water is led in pipes to the railway premises, and the supply for the whole town is delivered at one stand-pipe, near the goods-shed. The totally insufficient water-supply, therefore, is the chief drawback to the town.

(2). The system of collecting night-soil is done by sanitary carts under the control of the Municipality, the sterco being emptied into pits, which are situated about 2,000 yards from the nearest house. The same system applies to slops and household refuse.

(3). There have been very few cases of infectious disease of late, those which have occurred have been from some outside source, which have been isolated immediately at the Town Lazaretto.

(4). There are no public abattoirs at present, all the slaughtering being done at a place outside the town under the supervision of the Municipality.

(5). It is the duty of the Sanitary Inspector to visit all the butchers' shops in the town, and inspect all meat offered for sale; there are a few cases of diseased meat, and, when found, it is always condemned and buried.

(6). About twelve houses were condemned during the year, which will be destroyed in the course of time.

(7). As no rats have as yet been found in the District, no steps have been taken for their annihilation.

(8). The sanitation of the town is considered good, and everything is done to keep the area clean and free from disease.

WOODSTOCK.

(i) WOODSTOCK (MUNICIPALITY).

*Report of Dr. JOHN HEWAT, Medical Officer of Health.

(1). The source of the water-supply is from Newlands Springs under the control of a Water Board, consisting of representatives from Claremont, Mowbray, Rondebosch and Woodstock. The water is stored in a reservoir, and distributed by leadings throughout the Municipalities named, direct to the individual residences and works. The supply is not adequate, portion of Woodstock being supplied from the Cape Town supply. It is pure in quality and not liable to pollution.

(2). (a) Night-soil is collected by a regular system of departmental removal which is excellently worked.

(b) Slop-water is discharged into the street gutterings and carried ultimately by main sewers to the sea.

(c) Refuse is collected departmentally daily, and deposited on a depositing site, reclaiming ground from the sea.

(3). Infectious diseases have not been prevalent during the year 1905, and such cases as have occurred have, upon notification to the Municipality, been immediately dealt with by the Sanitary Department, and all precautions taken against any spread. No Infectious Diseases Hospital exists, but satisfactory arrangements have been made with the Corporation of Cape Town to admit all cases requiring isolation into their Infectious Diseases Hospital, either at Green Point, or their Small-pox Hospital at Maitland.

(4). No abattoirs exist in the Municipality, slaughtering not being allowed.

(5). All butcher shops are under constant inspection and supervision of the Sanitary Department, and during the year several prosecutions have taken place in regard to bad meat being exposed for sale.

(6). Every precaution has been taken in the Municipality to remedy all sanitary defects by an excellently worked and intelligent Sanitary Department.

The Municipality is divided into areas, and to each area a Sanitary Inspector is detailed who is responsible for all sanitary defects in his area, and reports to the Sanitary Superintendent who acts or reports to a Sanitary Committee of the Council who deal with it, and, if need be, obtain the advice of their Advising Health Officer.

(7). Rats are not so prevalent as in previous years, a rat-catcher being permanently employed with great success.

(8). I cannot speak too highly of the keenness of the Municipal Council in dealing with all matters appertaining to the public health, and the excellent work done by the Sanitary Superintendent with his able staff of Sanitary Inspectors.

(ii) MAITLAND (MUNICIPALITY).

* Report of Dr. JOHN HEWAT, Medical Officer of Health.

(1). The water-supply is deficient, requiring some of the inhabitants to resort to wells, which are in most cases only surface excavations, always liable to contamination. Through the energetic endeavours of the Council, arrangements have now been made to obtain an ample supply from Cape Town mains.

(2). With regard to the disposal of night-soil, the depositing site which is used on the Flats behind Maitland was condemned by me in 1904 as unsuitable and a source of nuisance and danger to the inhabitants around. I would recommend that arrangements be made to remove all night-soil to some distance from the inhabited parts of Maitland, so as to cause the least possible nuisance until a complete drainage scheme be entered into. The sterco removal is carried out departmentally, but still open to the great objection of not being done systematically and regularly, the antiquated ticket order system being in vogue. I believe it is the intention of the Council, after completing negotiations for a more suitable depositing site, to place this department on the system which I suggest, viz.:—A landlord's rate yearly to cover so many removals yearly, and each area by systematic supervision to be cleaned weekly. In that way there will not be the same tendency to the inhabitants saving the expense of frequent removals by delaying their orders for weeks at a time. In this way insanitary accumulations at all times exist throughout the Municipal area.

Stormwater.—Much has been done to improve the Municipality, such as the drain along the Main Road and the early projected drain along the Coronation Road. The stagnant pools of filth which used to stand about and around many of the dwellings are things of the past, as, more or less, all are now connected with the main drains.

Refuse Removal.—This has been carried out by systematic removals under departmental supervision with success, the refuse now being deposited on the Flats at a safe distance from all dwellings.

(3). No epidemics of infectious disease have occurred, and Maitland has shown a marked absence from any prevalence of the serious Zymotic diseases.

During the year ended June 30th, 1904, the following cases of infectious disease were notified:—Enteric Fever, 27; Diphtheria, 9; Scarlet Fever, 1; total, 37 cases.

The notifications during 1905 were as follows:—Typhoid Fever, 7; Scarlet Fever, 4; Diphtheria, 3; Erysipelas, 1; Tuberculosis, 3; Puerperal Fever, 1; Phthisis, 1; total, 20 cases.

(4) and (5). The Sanitary Department has given much time to the supervision of slaughter-houses, dairies, and cowsheds.

The slaughter-houses are kept as sanitary as possible, but are a long way from being the models of clean and properly supervised abattoirs, in which direction the Municipal Council have made a praiseworthy move, and I trust the Government will speedily awaken to the pressing needs of more care and supervision being exercised in the dressing of meat by having abattoirs erected under the required inspection and supervision.

(6). Improvements.—There was much done during the year 1905 in the way of road-making and laying of drains, more especially in the upper parts of Maitland, where the ponds of water and filth which stood around various houses is now drained into the collecting drain running down the Main Road.

In Brooklyn District much was done by the making of roads, but as yet no provision has been made for the collection or disposal of house slops and surface drainage generally.

A start has been made to kerb and gutter, which is much required, if not an imperative necessity, as the district is getting populous, and with the exception of the drain in the Main Road, no provision has yet been made for the collection of slops, etc., by kerbing and guttering, most of the slop-water soaking into the soil around the dwellings, which is a distinct danger to the public health.

Vital Statistics.—I append a table showing the number of births and deaths registered during 1904 and 1905. It will be seen that during 1905 the number of births was 379. In analysing this we find that there are 84 European males, 66 European females, 122 coloured males, and 107 coloured females, by which it will be noted that European males and females born are nearly equal, whereas 122 coloured males are born to 107 coloured females; further, that there are 150 Europeans born, compared to 229 coloured.

During 1905, 199 deaths were registered.

The highest monthly totals were in January and December, due to the increased death-rate amongst children under three years of age, mostly due to dietetic diseases during the warm months of the year.

In analysing the table in the appendix, we find 19 European males died, as compared with 18 European females; 89 coloured males, as compared with 73 coloured females; and, further, that 37 Europeans died, as compared with 162 coloured.

Work of the Sanitary Department.—Much good work has been done by the two Sanitary Officers during the year, a constant daily supervision taking place, with attention to sanitary defects, overcrowding, inspections, and prosecutions.

Personal.—I cannot close my report without thanking the Mayor and Councillors for the close attention and consideration they have given to all matters tending to improve and foster the public health, and to the Town Clerk, Engineer, and Inspectors for the ready way they have assisted me in dealing with sanitary matters generally.

TABLE showing the number of Births and Deaths Registered during 1904 and 1905.

MONTH.			Europeans.								Mixed.								Total.			
			1904.				1905.				1904.				1905.				1904		1905	
			M.		F.		M.		F.		M.		F.		M.		F.					
			Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.
January	...	...	7	1	7	3	6	2	5	2	12	7	10	3	12	9	8	8	36	14	31	21
February	...	...	2	...	2	2	5	...	4	5	6	6	13	16	11	7	4	7	23	24	24	19
March	...	...	3	4	6	2	6	...	8	2	7	6	9	5	8	4	13	7	25	17	35	13
April	...	...	4	1	1	...	4	1	5	...	6	2	10	3	5	7	7	6	21	6	21	14
May	...	...	7	...	6	...	8	...	4	2	12	6	15	7	9	9	13	6	40	13	34	17
June	...	...	5	2	7	2	7	2	3	4	12	6	12	6	12	3	7	4	36	16	29	13
July	...	...	2	...	12	...	6	4	10	2	7	8	3	3	10	10	15	5	24	11	41	21
August	...	...	7	1	1	...	5	3	3	...	6	5	9	7	5	8	10	4	23	13	23	15
September	...	...	1	...	7	2	9	...	4	...	14	8	8	6	10	4	5	5	30	16	28	9
October	...	...	7	...	10	1	9	2	5	...	11	5	3	4	21	8	11	10	31	10	46	20
November	...	...	9	3	3	1	11	1	10	...	7	7	3	5	10	7	8	4	22	16	39	12
December	...	...	6	4	7	3	8	4	5	1	8	7	8	6	9	13	6	7	29	20	28	25

(iii) GLEN LILY, FAIRFIELD AND PAROW (VILLAGE MANAGEMENT BOARD).

(1). The water-supply of this District is surface water or rain water, stored in tanks. Negotiations have been entered into with a local syndicate to receive water, proposed to be stored on the adjoining farm, called Plattekloof, the catchment

area being the Tygerberg Range of hills above the farm, but until Parliament meets nothing definite can be stated.

(2). The system of collection and depositing of night-soil is done once a fortnight from every dwelling and deposited on a farm owned by Mr. F. Kotze, in trenches, which are covered when full. Nothing yet has been done with regard to the collection of slop-water and other refuse, owing to the lack of finances.

(3). The extent to which infectious disease has prevailed has been very low, only two cases being reported, one of Enteric and the other of Diphtheria, during the year 1904. Nothing was reported during 1905.

In cases of this description the best available steps are taken to prevent the disease spreading, and the contacts are kept isolated. No Infectious Diseases Hospital accommodation has been provided.

(4). No abattoirs are established, nor are they contemplated. Mostly Cold Storage meat is sold here and consumed.

(5). No inspection is regularly carried out, owing to the absence of an Officer for that purpose, but the Officer employed by the Cape Divisional Council, I believe, makes a periodical inspection.

(6). In cases where complaints are made regarding sanitary defects, these are immediately remedied, and periodical inspections of places are made by the Sanitary Committee of this Board, but the present scattered area and general conditions of this District are somewhat against the usual sanitary and other unhealthy defects, as are prevalent in more crowded Districts.

(7). Rats are not prevalent and are seldom seen. Notices were posted up, calling for carcasses of rats for Bacteriological Examination, but none were forthcoming.

(8). The absence of a pure supply of water is at present being keenly felt by the residents of this village, and this will prove to be a most serious cause for apprehension should an available source of water-supply be not forthcoming very soon. The place is rapidly growing, and the surface water, which is at present used, with that stored in tanks from the rainfall, is getting very limited, and the want of water for domestic purposes is not conducive to matters pertaining to health.

(iv) DURBANVILLE (MUNICIPALITY).

*Report of Dr. L. F. BICCARD, Additional District Surgeon.

(1). The water-supply is obtained from two springs situated within the Municipal area; from these the water is lead away in galvanized pipes, and distributed from house to house. The supply is plentiful and pure, and there is no risk of contamination, either at the source or during transit.

(2). (a) The bucket system is in use; there are regular removals twice per week; a fresh set of pails, thoroughly washed and disinfected, replace the full ones.

(b) Slop-water is systematically removed by the Municipal slop-cart from hotels and private houses when deemed necessary by the Council.

(c) Household and other refuse are also removed by Municipal carts once weekly.

(3). With the exception of two cases of Diphtheria which were treated at home, there was no epidemic of infectious disease.

The only Hospital accommodation at present is a small two-roomed galvanised cottage set aside in the event of an outbreak of Small-pox.

(4). Two slaughter-houses exist within the Municipality. They are well kept under the supervision of the Cape Divisional Council's Inspector.

(5). There is no systematic inspection of meat, except by the above-named Inspector on his periodical visits.

(6). The sanitary condition of this Local Authority seems satisfactory.

(7). Rats are occasionally sent into the Health Department for examination; they have always been proved free from Plague.

WORCESTER.

(i) WORCESTER (MUNICIPALITY).

*Report of Dr. DIRK HUGO, Medical Officer of Health.

(1). No alteration has taken place in the water-supply since the last report. The purchase of a pure, and, I believe, adequate, supply of additional water has been authorised by the ratepayers, and it is greatly to be regretted that, though the authority has been secured considerably more than a year ago, no definite move has been made to bring this fresh supply into the town. Fortunately during the last year Enteric Fever has been considerably less prevalent, and Gastro-intestinal trouble among children not quite so common. The death-rate too was considerably lessened. Nevertheless the rapid increase of the population in the Hex River Valley accounts for a proportionate increase of pollution, and it is to be hoped that the proposed new water scheme will be carried out without any further delay.

(2). Satisfactory, and no alteration since last report. The sterco depositing grounds have been moved further afield. There have been numerous complaints of the insanitary condition of the storm-water drain running through the Railway Station yard. This conduit receives slops and other putrescible matter of a nondescript character, and as there is no adequate water-supply to scour this sluit, the matter festers there to the danger and annoyance of the employees on Station Hill.

(3). As above stated, the prevalence of infectious diseases has been considerably less. There is no infectious diseases Hospital.

(4). There are no public abattoirs, and their establishment is not contemplated. I cannot say that I am satisfied that the conditions under which slaughtering and cartage take place at present are as they should be.

(5). I have reason to believe that recently some diseased meat has been offered for sale, but the nature of the disease appears to be "Rot in sheep," more commonly known as liver "flake." As it only depends upon the flabbiness of the meat, etc., due to poorness of the animal affected, as to whether the meat is fit for sale or not, no serious notice need be taken of this disorder. Still the fact of diseased meat being offered for sale draws attention to the necessity of instituting a periodical inspection. For this purpose I suggest that, as there is a resident Veterinary Surgeon in the town, his services be availed of. I shall be glad to collaborate with him.

(6). No alteration since last report.

(7). Rats have increased largely since last report, and no special steps have been taken for their extermination.

(ii) RAWSONVILLE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a River, and conveyed in open furrows. The supply is adequate.

(2), (3), (4) and (5). None.

(6). Furrows are kept clean, and washing in same is prohibited.

(7). There are no rats.

WYNBERG.

(i) MOWBRAY (MUNICIPALITY).

*Report of Dr. MATTHEW HEWAT, Medical Officer of Health.

(1). The water-supply is almost entirely derived from the Suburban Municipal Waterworks, which are controlled by the Municipality jointly with the neighbouring Municipalities. The water is pure and good, but entirely inadequate, even although owing to the total absence of a drainage scheme none is required for that purpose.

The water is collected from springs at the base of Table Mountain, stored in a reservoir, and distributed in pipes in some instances from the mains, and in some by the dribble system.

* Forwarded by Municipality for publication.

(2). Night-soil is collected by means of the mixed pail system, and deposited on the Municipal lands. Slop-water and household and other refuse are similarly dealt with. All this work is done departmentally, and on the whole satisfactorily.

(3). During the period under review (eighteen months), the following infectious diseases have been notified:—Tuberculosis, 31 cases; Enteric Fever, 20 cases; Scarlet Fever, 10 cases; Diphtheria, 1 case; Erysipelas, 4 cases; and Puerperal Fever, 1 case. Total, 67 cases.

On the notification of such cases every precaution is taken to prevent spread of the disease, so far with success, as in no instances were any of these diseases prevalent or epidemic.

There is no provision for the Hospital treatment of infectious cases.

Vaccination during this period has been practically in abeyance; but providentially no case of Small-pox has occurred.

(4). There are no abattoirs, nor is slaughtering allowed within the Municipal area.

(5). Meat is not systematically inspected, but occasional surprise visits to butcher shops are made, and on several occasions meat unfit for human use has been found and the sellers dealt with.

(6). A staff of Sanitary Inspectors under the guidance of a Medical Officer of Health are employed to deal with all occurrences likely to be prejudicial to the Public Health.

(7). Rats are prevalent throughout the Municipal area. A rat-catcher is employed, who does something towards preventing their too rapid increase.

(8). All matters appertaining to sanitation and public health are systematically and carefully attended to. The death-rate of 8.12 per mille proves Mowbray to be one of the healthiest Municipalities in South Africa. The birth-rate is 33 per mille.

(ii) CLAREMONT.

*Report of DR. GEORGE G. EYRE, Medical Officer of Health.

(1). The sources of the water-supply is the Albion Spring, the Kommetje Spring and mountain streams, of which the Kommetje Spring and the mountain streams are in Claremont, while the Albion Spring is in Rondebosch.

During the seven summer months the supply is pumped direct into the mains from the Albion Spring, augmented when necessary by the supply stored in the Newlands Reservoir. During the five winter months the supply is derived from the water stored in the Newlands Reservoir and in the old service reservoir.

The water is distributed by cast-iron mains and galvanised iron service pipes. The supply is adequate and is not liable to pollution.

The total consumption of Claremont is:—

By 205 private meters	80,500 gals. per diem.
By dribble system to 1936 houses	213,000 „ „
Public wash-houses	6,500 „ „
Street watering	28,000 „ „

(2). (a) The pail system only is in use, the night-soil being buried in trenches in sandy soil on which crops are raised. It is collected weekly from ordinary dwellings, bi-weekly from hotels, boarding-houses and business premises, and tri-weekly from large business establishments (*e.g.* breweries).

(b) Slop-water is removed daily and is used for irrigation purposes on the sanitary farm.

(c) Household refuse is collected regularly from each house by the Municipal carts and is buried in vacant ground in deep trenches, each deposit being covered up with soil as soon as laid.

(3). From July 1st, 1904, to December 31st, 1905, a period of eighteen months, 122 cases of infectious disease have been notified, comprising 61 cases of Enteric Fever, 30 of Tuberculosis, 16 of Diphtheria, 12 of Scarlet Fever, 2 of Small-pox and 1 of Puerperal Septicæmia. They were all sporadic cases, with the exception of a limited epidemic of Enteric Fever which, in all probability originated from a case imported from outside this Municipality.

(4). No slaughtering is carried out in this Municipality.

(5). All butchers' shops are inspected at least once a month, and several convictions have been obtained as the result of prosecutions for selling meat unfit for human consumption.

(6). The chief improvement made in this direction is the construction of filter-beds to purify the drainage into the water-course traversing the Municipality on the Flats side of the railway line. Numerous prosecutions, with a large proportion of convictions, have been instituted to remedy the sanitary defects caused by overcrowding, accumulation of refuse, etc.

(7). Rats are not very prevalent. 3,826 were caught and cremated in 1905.

(8). An important sanitary defect which has not yet been satisfactorily obviated is the pollution of the areas surrounding the smaller tenements with liquid drainage, which is supposed to consist of waste water, but which also contains in considerable proportion waste from kitchens and other animal matter.

(iii) RONDEBOSCH (MUNICIPALITY).

No report furnished.

(iv) WYNBERG (MUNICIPALITY).

*Report of Dr. P. B. TRAVERS STUBBS, Medical Officer of Health.

(1). The water-supply for Wynberg is obtained from the catchment area on Table Mountain, augmented from springs on the Orange Kloof farm. The storage reservoirs contain 54 million gallons, which at present suffices for the Wynberg Municipality, but sooner or later more will have to be conserved as the Municipality extends. The water is pure and excellent, and can be rendered more so by the construction of filter beds, which are needed, in order to prevent the choking of the house leadings, which is becoming of frequent occurrence nowadays.

The catchment area should be fenced in to prevent any pollution of the water by the ever increasing numbers of mountain climbers and pleasure seekers who utilise the footpaths along the edge of the reservoirs.

(2). The collection of night-soil is still mainly carried out by the pail system, and tipped into the main drainage sewer; some however is buried on the Flats. Day by day houses are being connected with the main drainage, which has been in operation some months now, but it will be some years before the pail system is done away with.

Household refuse is collected daily and deposited on the Flats, that from the streets is used for filling up old roads and disused clay pits.

(3). There has been a marked reduction in the number of cases of infectious disease, but from returns now coming in one learns that a larger percentage of the inhabitants are suffering from Phthisis.

There is no infectious diseases Hospital, although at no distant date one will have to be established, and an excellent site exists near Ottery Station.

(4). No public abattoirs exist, nor is there any likelihood of such being established.

(5). There is no systematic inspection of meat, for the simple reason that it is brought into the Municipality at all hours, and in every conceivable way to frustrate detection. It would require a large staff of Sanitary Inspectors to undertake this work. Frequent visits, however, are made to the butchers' shops.

(6). Respecting any sanitary defects, notices have been served on the offenders, and in cases of defiance legal steps have been resorted to.

(7). Around the bakeries and butchers shops rats to a large extent are in evidence. Rat traps are issued to applicants for same, and payment has been made for rodents brought to the office.

No sanitary conveniences exist for the public, nor has any provision been made for providing lavatories and urinals. There are several suitable sites for placing such lavatories, which would be conferring an untold blessing on the public.

Report of the Medical Officer of Health for the Colony.

PART IV.

Reports of the Medical Inspectors on the working of Part I of "The Contagious Diseases Prevention Act, 1885," during the Years 1904 and 1905.

1. CAPE TOWN.

DR HAROLD A. ENGELBACH, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

The attendance of women for examination has not been as satisfactory as during the preceding year, and the numbers of registered women have been reduced from 188 on the 31st December, 1902, to 49 on the 31st December, 1903, and to 46 on the same date in 1904. This reduction, and the great difficulty in getting these women to come up for examination, is without doubt due to the working of the "Brothel Suppression Act" of 1902, which is in direct opposition to part I of Act 39 of 1885.

There is no doubt that at the present time there is a large amount of prostitution carried on in Cape Town, and it is a great pity, from a Public Health point of view, that the women who ply this noxious trade are not given more encouragement to report for examination. It is almost impossible under the present existing circumstances to get at these women, as fear of the Police causes them to remove from place to place, and to carry out their trade in secret, thus becoming a source of danger to innocent persons.

During the latter part of the year patients were received from Simon's Town, the contagious diseases Hospital at that place having been closed.

I regret having to chronicle one death during the year, a coloured female, who died of Phthisis on the 28th December.

TABLE I.—SHOWING THE OPERATION OF THE CONTAGIOUS DISEASES PREVENTION
ACT OF 1885, DURING THE YEAR 1904.

Number of women on the Register on the 31st December, 1903...	49
Number of fresh cases registered during the year 1904...	69
Total number dealt with during the year 1904 under Part I...	118
Number of women removed from the Register during 1904, shown on Table II.	72
Remaining on Register, 31st December, 1904 ...	46
Voluntary Submissions under Section 14 ...	118
Compulsory Submissions under Section 10 ...	Nil.
Number of prosecutions under Section 17 ...	5
Total number of women examined ...	118
Total number of examinations ...	434
Number of women dealt with under Part II., shown on Table VI. ...	39

TABLE II.—SHOWING CAUSES OF REMOVAL FROM THE REGISTER DURING THE YEAR 1904.

Left District	40
Gone to Service	1
Disappeared	29
Died... ..	1
Married	1
	—
Total... ..	72

TABLE III.—SHOWING ADMISSIONS TO HOSPITAL, NATURE OF DISEASES, AND CAUSE OF DEATH.

Remaining on the Register 31st December, 1903, including 12 under Part II.	19
Total number of separate admissions, including those shown on Tables V., VI., and VII.	80
	—
Total	99

Nature of Disease.

Gonorrhœa... ..	54
Secondary Syphilis	9
Tertiary Syphilis... ..	8
Chancroid, Eruption of Vulva, etc.	28
	—
Total	99

Race.

European... ..	14
Coloured... ..	85
	—
Total... ..	99

Daily average number resident	12·1
Average stay in hospital per admission (days)	26·6
Average stay in hospital per individual (days)	33·4
Average daily cost per head... ..	6s. 6 $\frac{3}{4}$ d.
Discharged, 92, died (of Phthisis), 1... ..	93
Remaining in hospital 31st December, 1904	6

TABLE IV.—SHOWING THE NUMBER OF WOMEN UNDER EXAMINATION DURING EACH MONTH SINCE 1892.

Month.	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
January	173	138	172	195	223	263	265	305	198	278	263	190	52
February	173	138	174	207	249	273	260	311	200	301	269	189	63
March ...	180	147	180	201	259	294	254	324	217	300	260	114	75
April ...	186	143	184	207	266	277	247	305	188	268	225	73	87
May ...	182	138	185	216	260	258	228	299	180	239	234	49	80
June ...	196	145	182	219	252	268	228	297	179	222	226	40	69
July ...	171	146	186	217	254	261	236	267	177	239	239	38	73
August...	159	150	192	217	256	280	266	239	178	242	251	43	55
September	171	159	189	215	254	275	255	221	201	265	234	54	59
October	181	164	196	214	264	280	277	171	209	259	236	50	62
November	175	166	201	215	262	279	295	174	229	260	227	50	61
December	134	165	202	225	270	273	289	187	267	259	219	52	46

TABLE V.—SHOWING ADMISSIONS TO HOSPITAL FROM WYNBERG DURING THE YEAR 1904; AND THE NATURE OF THE DISEASES.

Remaining in hospital on December 31st, 1903	3	
Total number of separate admissions during the year 1904	7	
		—
Total	10	
Nature of Disease.		
Gonorrhœa	5	
Secondary Syphilis... ..	1	
Tertiary Syphilis	1	
Chancroid, Eruption of Vulva, etc.	3	
		—
Total	10	
Race.		
European... ..	—	
Coloured... ..	10	
		—
Total	10	
Average duration of stay in hospital “in days”	39	
Discharged	9	
Remaining in hospital on 31st December, 1904	1	

TABLE VI.—SHOWING THE NUMBER OF ADMISSIONS UNDER PART II. OF THE ACT AND THE NATURE OF THE CASES DEALT WITH..

Remaining in hospital, 31st December, 1903	12	
Total number of admissions during the year 1904... ..	27	
		—
Total	39	
Nature of Disease.		
Gonorrhœa... ..	9	
Secondary Syphilis	8	
Tertiary Syphilis	6	
Chaneroid, Eruption of Vulva, etc.	16	
Total... ..	39	
Race.		
European	10	
Coloured	29	
		—
Total... ..	39	
Average duration of stay in hospital “in days”	54·8	
Discharged during the year 1904	36	
Remaining, 31st December, 1904	—	

TABLE VII.—SHOWING ADMISSIONS TO HOSPITAL FROM SIMONSTOWN DURING THE YEAR 1904, AND THE NATURE OF THE DISEASE.

*Remaining in hospital, 31st December, 1903	—	
Number of separate admissions during the year 1904... ..	4	
Nature of Disease.		
Gonorrhœa... ..	3	
Chancroid, Eruption of Vulva, etc.	1	
Total... ..	4	
Race.		
European	—	
Coloured... ..	4	
		—
Total... ..	4	

* The Lock Hospital at Simon's Town was closed on 30th September, 1904, since which date Contagious Disease cases were sent to Cape Town for treatment.

Average duration of stay in hospital "in days"	37
Discharged cured	4
Remaining in hospital on 31st December, 1904	—

(b) REPORT FOR THE YEAR 1905.

The attendance of women under Part I. of the Contagious Diseases Prevention Act of 1855 for examination at the Lock Hospital, Cape Town, has been satisfactory during the year, especially during the last three months. The total number of examinations during the year was 372, of which no less than 174 examinations were made between 1st October and 31st December, 1905. The number of registered women increased from forty-six on the 31st December, 1904, to seventy-one on the 31st December, 1905, whereas the total number of women examined was 118. There were forty-eight admissions to Hospital for treatment, and the average stay of each patient in Hospital was 35·8 days.

Fourteen women were prosecuted under Section 17 of the Act for not attending for examination, and forty-seven were removed from the register during the year (see Table II.). Thirty-four of these disappeared or absconded, twelve removed to some known address, and one died.

There were four admissions to Hospital from Wynberg, and eleven from Simoustown. With regard to Part II. of the Contagious Diseases Act, no less than fifty-nine women presented themselves for treatment. These were all taken into Hospital, and with the three cases remaining from 1904, made a total of sixty-two persons dealt with under this section of the Act. Fifty-six of these patients were discharged during the year, and six remained to be carried over to 1906.

I regret having to chronicle one death from Phthisis, a coloured female, who died on the 30th October, 1905.

The wards and other buildings connected with the Hospital are clean and tidy, and the discipline good.

Electric light was installed into the yard during the early part of the year, and, owing to the escape of two patients from the Hospital, it was found necessary to heighten the outside wall in two places.. I may mention that these two patients were found by the police and promptly returned. Attached are tables showing the full working of the Act for the year 1905.

TABLE I.—SHOWING THE OPERATION OF THE CONTAGIOUS DISEASES PREVENTION ACT OF 1885 DURING THE YEAR 1905.

Number of women on the Register on the 31st December, 1904	46
Number of fresh cases registered during the year 1905	72
Total number dealt with during the year 1905 under Part I.	118
Number of women removed from the Register during 1905, "shown on Table II."	47
Remaining on the Register on December 31st, 1905	71
Voluntary Submissions under Section 14	118
Compulsory Submissions under Section 10	—
Number of Prosecutions under Section 17	14
Total number of women examined	118
Total number of Examinations	372
Number of women dealt with under Part II. "shown on Table VI."	62

TABLE II.—SHOWING CAUSES OF REMOVAL FROM THE REGISTER DURING THE YEAR 1905.

Left District	19
Died	1
Disappeared	15
Service	12
Total	47

TABLE III.—SHOWING ADMISSIONS TO HOSPITAL, NATURE OF DISEASES, AND CAUSE OF DEATH.

Remaining on the Register 31st December, 1904, including 3 Patients under Part II.	9
Total number of separate admissions, including Wynberg and Simon's Town patients and those admitted under Part II	116
Nature of Disease.	
Gonorrhœa	60
Sec. Syphilis	12
Tertiary Syphilis	4
Chancroid, Eruption of Vulva, etc.	49
Total	125
Race.	
European	12
Coloured	113
Total	125
Average daily number resident	17.3
Average stay in Hospital per individual "in days"	57.5
Average stay in Hospital, per admission	51.1
Average daily cost per head	4s. 0 4-5d.
Discharged, 112; Died (of Phthisis), 1	113
Remaining in Hospital on 31st December, 1905	12

TABLE IV.—SHOWING THE NUMBER OF WOMEN UNDER EXAMINATION DURING EACH MONTH SINCE 1892.

Month.	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
January ...	173	132	171	195	223	263	265	305	198	278	263	190	52	47
February ...	173	138	174	207	249	273	260	311	200	301	269	189	63	49
March ...	180	147	180	201	259	294	254	324	217	300	260	114	75	37
April ...	186	143	184	207	266	277	247	305	188	268	225	73	87	33
May ...	182	138	185	216	260	258	228	299	180	239	234	49	80	44
June ...	196	145	182	219	252	268	228	297	179	222	226	40	69	46
July ...	171	146	186	217	254	261	236	267	177	239	239	38	73	43
August ...	159	150	192	217	266	280	266	239	178	242	251	43	55	43
September ...	171	159	189	215	254	275	255	221	201	265	234	54	59	48
October ...	181	164	196	214	264	280	277	171	209	259	236	50	62	48
November ...	175	166	201	215	262	279	295	174	229	260	227	50	61	69
December ...	134	165	202	225	270	273	289	187	267	259	219	52	46	71

TABLE V.—SHOWING ADMISSIONS TO HOSPITAL FROM WYNBERG DURING THE YEAR 1905, AND THE NATURE OF THE DISEASES.

Remaining in Hospital on 31st December, 1904	1
Total number of separate Admissions during the year 1905	3
Nature of Disease.	
Gonorrhœa	3
Chancroid, Eruption of Vulva, etc.	1
Total	4
Race.	
European	3
Coloured ...	1
Total	4
Average duration of stay in Hospital "in days"	42.7
Discharged ...	2
Remaining in Hospital on 31st December, 1905	2

TABLE VI.—SHOWING THE NUMBER OF ADMISSIONS AND THE NATURE OF THE CASES DEALT WITH UNDER PART II. OF THE CONTAGIOUS DISEASES ACT.

Remaining in Hospital on 31st December, 1904	...	...	3*
Total number of admissions during the year 1905	...	...	59
Nature of Disease.			
Gonorrhœa	...	...	10
Sec. Syphilis	...	...	11
Tertiary Syphilis	...	...	3
Chancroid, Eruption of Vulva, etc.	...	...	38
Total	...	...	62
Race.			
European	...	...	10
Coloured	...	...	52
Total	...	...	62
Average duration of stay in Hospital "in days"	...	...	61.6
Discharged during the year	...	...	56
Remaining on the 31st December, 1905	...	...	6

TABLE VII.—SHOWING ADMISSIONS TO HOSPITAL FROM SIMONSTOWN DURING THE YEAR 1905, AND THE NATURE OF THE DISEASES.

Remaining in Hospital on the 31st December, 1904	...	...	—
Number of separate admissions during the year 1905	...	...	11
Nature of Disease.			
Gonorrhœa	...	...	8
Chancroid, Eruption of Vulva, etc.	...	...	3
Total	...	...	11
Race.			
European	...	...	—
Coloured	...	...	11
Total	...	...	11
Average duration of stay in Hospital "in days"	...	...	68
Discharged	...	...	10
Remaining in Hospital on 31st December, 1905	...	...	1

TABLE VIII.—PART II.—WYNBERG.—SHOWING THE NUMBER OF ADMISSIONS AND AND THE NATURE OF THE CASES DEALT WITH UNDER PART II. OF THE CONTAGIOUS DISEASES ACT.

Remaining in Hospital, 31st December, 1904	...	...	—
Number of admissions during the year 1905	...	...	1
Total	...	...	1
Race.			
European	...	...	—
Coloured	...	...	1
Total	...	...	1

Nature of disease for which patient was admitted during the year:—

Secondary Syphilis	...	...	1
Discharged during the year 1905	...	...	1
Remaining on December 31st, 1905	...	...	—
Duration of stay in Hospital "days"	...	...	77

* Includes one admission from Wynberg.
NOTE.—This patient is included in the total (62), as shown in "Table IV., Part II."

2. WYNBERG.

Dr. H. CLAUDE WRIGHT, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

Under Part I. of this Act there are no remarks to make beyond the general remarks of previous years.

The number of women examined during the year was 26, all coloured. Of the total number 26, inclusive of 17 remaining on the register from 1903, and 9 added during 1904, 1 was relieved by order of the Magistrate, 1 died, 1 absconded, and 12 removed to some known address. The names of the latter however still remain on the register, so that they can be laid hold of at once should they return to the district. There were 322 separate examinations during the year. Ten women were found diseased and sent to hospital.

There was one prosecution under Section 17 of the Act.

(b) REPORT FOR THE YEAR 1905.

During the past year the working of the Act, Part I., Contagious Diseases, presents very little variation to that for 1904, with the exception that there were fewer cases by six sent to Hospital than during the previous year. The class of females does not vary from that described in previous reports. They are of a low type, though some are still of the domestic servant class, and in service, and with the sanction of their mistresses, they continue to attend for periodical examination.

3. SIMON'S TOWN.

Dr. H. CLARKE, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

The Contagious Diseases Prevention Act of 1885 worked satisfactorily in this District during the year 1904. When called upon to frame my annual statement on this enactment, I always bear in mind the fact that in 1888, when it was first promulgated, the Director-General of the Naval Medical Department wrote in his annual report on the health of the Navy for that year that:—"Simon's Town and St. Helena are stated to have caused the greater part of the diseases (venereal), *more especially the former locality.*" A startling statement, if the extent of the command, extending up the East and West Coasts of Africa, be considered, but one not to be astonished at, for on the opening day at the Lock Hospital 68 coloured girls, all professional prostitutes, presented themselves for periodical examination, none of whom had previously been subject to any surveillance whatever, while many of them were found diseased. A great change has now taken place, for the Fleet Surgeon of the "Crescent," whose statement is confirmed by the Annual Reports of the Director-General, has recently written to me to the following effect:—"I have much pleasure in testifying to the complete success of the working of the Contagious Diseases Prevention Act in Simon's Town. In proof of this, I beg to bring to your notice the fact that, between the date of our arrival, 18th April, and the end of the last quarter, there has not been a single entry on the sick list due to venereal disease contracted at that port. The 'Crescent' during this period had an average daily strength of 583, and 763 officers and men were at one time or another on the ship's books. I may mention, as a contrast, that before leaving Portsmouth at the commencement of the commission there were 6 entries on the sick list for Syphilis primary, 11 for Syphilis secondary, 5 for Gonorrhœa, and 4 for sequelæ of Gonorrhœa, while one of the last mentioned, after a severe illness, had to be invalided home, as his constitution was ruined."

Were the Act withdrawn, I feel confident there would be an immediate recrudescence of disease, for one diseased woman is capable of infecting many men. For instance, a few months back a prostitute was given into custody by an officer at Noah's Ark Camp here, at the request of a sergeant, who counted twenty-seven men go into the hut where the girl was plying her calling. I feel certain that no other measure than one providing for the compulsory periodical examination of such females can possibly keep the terrible disease of Syphilis within bounds.

Thirty-seven women remained on the register on 31st December, 1903; 10 were removed during 1904, of whom 8 absconded, 1 got married, and 1 was taken off by the order of the Magistrate. Eight were placed on the register during the year, making a total dealt with of 45, all of whom, with the exception of 3, were Coloured.

The Lock Hospital at Simon's Town was closed on September 1st, 1904, and women when found diseased are now sent to Cape Town for treatment.

(b) REPORT FOR THE YEAR 1905.

In reporting on the working of the Contagious Diseases Prevention Act of 1885 in this District during the year 1905, I do not think I can add anything to the copy of a letter, appearing below, which the Senior Medical Officer of His Majesty's Fleet has been good enough to write to me. The women mentioned by him as having diseased two bluejackets were not on the list for periodical examination at the time; but, fortunately, I was able, the day after Dr. Hoskyn reported the cases, to obtain, with the assistance of the Lay Inspector, affidavits against them, when they promptly submitted themselves for examination, and were found diseased. I think those cases show the beneficial working of the Act, for had not those females been detected and put into Hospital for treatment, they would doubtless have spread the disease, and possibly ruined many others, in addition to becoming "rotten" themselves.

"H.M.S. Crescent,
"Simon's Bay, 12th February, 1906.

"I think it only fair to you to let you know the result of the working of the Contagious Diseases Act last year with regard to this ship.

"During the year the ship was absent from Simon's Town for two cruises, lasting each about a month, and for several smaller periods, amounting to about one other month, three months altogether, and the average daily numerical strength of the crew was 616.

"Twenty-four cases of venereal disease were put on the sick list, and of these only two were contracted at Simon's Town, and I would like to add that the fact that the two prostitutes were found and dealt with almost as soon as reported, reflects the greatest credit on the working of the Act in Simon's Town.

"During the whole time we have been on the Station, almost two years, these are the only cases that can be traced to Simon's Town. Allow me to congratulate you most heartily on the brilliant success of your work."

4. EAST LONDON.

DR. J. BARCROFT ANDERSON, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

There are at present practically no Europeans in town who are liable to be dealt with under this Act in consequence of the operation of Act 36 of 1902.

Among the Native women there has been very little sickness. Otherwise, the working of the Act, as far as they are concerned, has remained unchanged.

(b) REPORT FOR THE YEAR 1905.

With respect to the working of the Contagious Diseases Prevention Act of 1885 in this District during the year 1905, I have the honour to report that there were Native women only on the list.

Any European women whose mode of life would have rendered them liable to be dealt with under this Act were dealt with under Act 36 of 1902 (the Morality Act).

Amongst these Native women there was very little sickness.

This Act is a boon to them, by enabling them to receive, and be cured by, hospital treatment, which they would not otherwise obtain; and is a benefit to the public, in so far as it provides for the isolation of those whose disease, if left at large, might be conveyed not only to such as deviate from the highest principles of monogamatic excellence, but also to innocent persons.

I believe that to leave these diseases absolutely uncontrolled by State supervision would be detrimental to the public health, and that to place them under the same laws as all other infectious diseases would result either in their not being notified, or would become an intolerable burden upon those liable to notify, and upon any who might innocently contract them.

5. KING WILLIAM'S TOWN.

DR. HENRY M. CHUTE, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

Under Part I. of Act seventeen women have been dealt with; of these four were found to have been affected, and were admitted into hospital. The number of cases sent to this hospital for treatment from East London, under Part I., has been five.

Part II. of the Act continues to work satisfactorily. Natives voluntarily avail themselves of the advantages of the hospital for obtaining treatment, and during the year fifty-seven cases were treated.

Remaining on December 31st, 1903:—Males, 2; females, 0. Admitted:—Males, 32; females, 23. Cured:—Males, 33; females, 21. Remaining on December 31st, 1904:—Males, 1; females, 2. Total:—Males, 34; females, 23.

The average daily cost of each patient was 2s. 9·5-10d.

(b) REPORT FOR THE YEAR 1905.

Under Part I. of the Act, thirteen women have been dealt with; of these three were found to have been affected, and were admitted into Hospital.

The number of cases sent to this Hospital for treatment from East London under Part I. has been thirteen.

Part II. of the Act continues to work satisfactorily. Natives voluntarily avail themselves of the advantages of the Hospital for obtaining treatment, and during the year 52 cases were treated.

Remaining on December 31st, 1904:—Males, 1; females, 2. Admitted during year:—Males, 23; females, 26. Cured:—Males, 22; females, 26. Remaining on December 31st, 1905:—Males, 2; females, 2. Total:—Males, 24; females, 28. Total: 52.

6. PORT ELIZABETH.

Dr. J. UPPLEBY, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

Eleven hundred and seventy-one examinations were performed during the year, the number of women examined being one hundred and eight, comprised of eighteen Europeans and ninety Coloured. Twenty-nine women were found to be diseased, and were duly treated at the Lock Hospital, the average duration of stay being forty-five and three-quarter ($45\frac{3}{4}$) days, and the daily average number of women in Hospital eight (8).

There were four cases of Primary Syphilis, and twenty-five cases of Gonorrhœa. Eight new cases (voluntary) were placed on the Register. There were forty-five prosecutions under Section 17 of the Act. The average cost per diem of each patient under treatment was two shillings and ninepence halfpenny (2s. 9½d.). The internal working of the Hospital was satisfactory, discipline being well maintained, and the women under treatment willing and cheerful in performing the usual domestic duties.

(b) REPORT FOR THE YEAR 1905.

Dr. J./P. FENOULHET, Acting Medical Inspector.

Six hundred and forty-four examinations were performed during the year, the number of women examined being seventy-nine, comprised of seven Europeans and seventy-two Coloured. Four new cases (three voluntary and one com-

pulsory) were placed on the Register during the year. Nine women, who were on the Register on the 31st December, 1904, disappeared, without having presented themselves for examination. Forty-six women were found to be diseased, and were duly treated at the Lock Hospital, the average duration of stay being forty and a half days, and the daily average number of women in Hospital being nine. There were nine cases of Primary Syphilis, and thirty-seven cases of Gonorrhœa. The average cost of each patient under treatment was two shillings and eightpence three farthings per diem.

7. UITENHAGE.

Dr. J. UPPLEBY, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

One hundred and fourteen examinations were made during the year, the number of women examined being eleven, three of whom were found to be affected with Gonorrhœa. Four women who were on the register on the 31st December, 1903, disappeared without having presented themselves for examination. There were no new cases placed on the register, and no women died during the year. There were three prosecutions under Section 17 of the Act.

The average cost per diem of the women who were found to be affected, and who were treated in the Port Elizabeth Lock Hospital, was 2s. 9½d.

(b) REPORT FOR THE YEAR 1905.

Dr. J. P. FENOULHET, Acting Medical Inspector.

Fifty examinations were performed during the year, the number of women examined being nine. Two women who were on the register on the 31st December, 1904, disappeared without having presented themselves for examination. None of the women examined were found affected with disease; there were no new cases placed on the register during the year. One woman died. There were six prosecutions under Section 17 of the Act.

8. UMTATA.

Dr. R. H. WELSH, Medical Inspector.

(a) REPORT FOR THE YEAR 1904.

Work started on 29th March, but the Hospital was not opened until 13th July, 1904. There has hardly been time to judge how the Act will work, but the number of women found to be diseased and placed under treatment shows how urgently necessary it was that something should be done to attempt to stop or modify the ravages caused by contagious diseases. The buildings are of a very primitive nature, and a kitchen, store-room, closets, etc., are additions which should be provided at as early a date as possible.

(b) REPORT FOR THE YEAR 1905.

The number of women found diseased has not been so great as in the previous year. It is also most gratifying to learn that venereal disease has not been so common as in previous years, either amongst the members of the Colonial Forces stationed here, or amongst the civil population. There is no doubt that a number of women do escape examination, and so propagate a certain amount of disease, but, on the whole, the Act has certainly been most beneficial here.

There has been no expenditure in buildings during the past year. A kitchen, bath-room, store-room, and closets should be provided when possible.

